DOCUMENT RESUME

ED 224 151 EA 015 243

AUTHOR	Hartman, Peggy L.; Hartman, William T.
TITLE	Local Special Education Planning Model: User's Manual.
INSTITUTION	Stanford Univ., Calif. Inst. for Research on Educational Finance and Governance.
SPONS AGENCY	National Inst. of Education (ED), Washington, DC.
REPORT NO	IFG-PR-82-A20
PUB DATE	Jul 82
GRANT	OB-NIE-G-78-0212
NOTE	214p.
AVAILABLE FROM	Publications, Institute for Research on Educational Finance and Governance, School of Education, CERAS Building, Stanford University, Stanford, CA 94305 ($5.00).
PUB TYPE	Guides - Non-Classroom Use (055) -- Reports - Descriptive (141)
EDRS PRICE	MF01/PC09 Plus Postage.
DESCRIPTORS	*Computer Programs; Cost Effectiveness; Data Analysis; Educational Needs; Elementary Secondary Education; Management Information Systems; Mathematical Models; *Program Costs; School Districts; *Special Education; Student Placement; Student Teacher Ratio; Worksheets
IDENTIFIERS	*Local Special Education Planning Model

ABSTRACT

To help school districts estimate the present and future needs and costs of their special education programs, this manual presents the Local Special Education Planning Model, an interactive computer program (with worksheets) that provides a framework for using a district's own data to analyze its special education program. Part 1 of the manual discusses the model, its development, and its four operating steps, which include filling out worksheets, entering the data into the computer, reviewing the output, and making alternative projections. Part 2 describes how to complete the eight worksheets, which cover basic district data, special education categories and instructional programs, related district services, current and anticipated student placements in the instructional programs, personnel ratios, and district support services. Entering the data into the computer is explained in part 3, while part 4 reviews 18 reports generated by the model that show the current and future costs, placements, personnel requirements, and program and services requirements of a district's total special education program. The final part discusses how to generate alternative projections. Attached to the manual are copies of the model's computer program and blank copies of the eight worksheets. (Author/RW)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED224151

IFG

Institute for Research on Educational Finance and Governance

SCHOOL OF EDUCATION STANFORD UNIVERSITY

U.S. DEPARTMENT OF EDUCATION
NATIONAL INSTITUTE OF EDUCATION
EDUCATIONAL RESOURCES INFORMATION
CENTER (ERIC)

☒ This document has been reproduced as received from the person or organization originating it.

☐ Minor changes have been made to improve reproduction quality.

- Points of view or opinions stated in this document do not necessarily represent official NIE position or policy.

EA 015 243

Project Report No. 82-A20

LOCAL SPECIAL EDUCATION PLANNING MODEL: USER'S MANUAL

Peggy L. Hartman
William T. Hartman

July 1982

Peggy L. Hartman is a special education consultant and formerly a Research Assistant at IFG.

William T. Hartman is a professor in the Division of Educational Policy and Management, College of Education at the University of Oregon.

This project was funded under Grant No. OB-NIE-G-78-0212 from the National Institute of Education. It does not necessarily represent the views of that agency.

INSTITUTE FOR RESEARCH ON EDUCATIONAL FINANCE AND GOVERNANCE

The Institute for Research on Educational Finance and Governance is a Research and Development Center of the National Institute of Education (NIE) and is authorized and funded under authority of Section 405 of the General Education Provisions Act as amended by Section 403 of the Education Amendments of 1976 (P.L. 94-482). The Institute is administered through the School of Education at Stanford University and is located in the Center for Educational Research at Stanford (CERAS).

The research activity of the Institute is divided into the following program areas: Finance and Economics; Politics; Law; Organizations; and History. In addition, there are a number of other projects and programs in the finance and governance area that are sponsored by private foundations and government agencies which are outside of the special R&D Center relationship with NIE.

Abstract

This user's manual describes a computer model which is designed to provide a systematic process for estimating the needs and costs of special education to local educational agencies. It establishes a framework for gathering, ordering and analyzing relevant information for a district's special education program, using the district's own data. A series of 18 reports are generated which show all current and future costs, student placements, personnel requirements, and program and service configurations of the district's total special education program.

CONTENTS

I. PLANNING FOR SPECIAL EDUCATION. 1

- The Local Special Education Planning Model . . 1
- Background and Development of the Model. . . . 2
- Setting Up the Program 4
- Operating the Model. 4

II. COMPLETING THE WORKSHEETS. 6

- Worksheet 1, District Information. 7
- Worksheet 2, Special Education Categories. . . 12
- Worksheet 3A, Instructional Programs 15
- Worksheet 3B, Related Services 22
- Worksheets 4A and 4B, Student Placements . . . 29
  - Instructional Programs (Current). 31
  - Related Services (Current). 38
  - Information for Worksheet 4A and 4B 41
  - Instructional Programs (Anticipated). . . . 43
  - Related Services (Anticipated). 47
- Information for Worksheet 5. 50
- Worksheet 5, Personnel Ratios. 52
- Worksheet 6, District Support Services 62

III. ENTERING THE DATA 71

IV. REVIEWING THE REPORTS 82

V. MAKING ALTERNATIVE PROJECTIONS 129

REFERENCES 134

LOCAL SPECIAL EDUCATION PLANNING MODEL COMPUTER PROGRAM LISTING 135

BLANK WORKSHEETS

I. PLANNING FOR SPECIAL EDUCATION

The provision of educational programs and services for handicapped children is a responsibility that requires effort, commitment and careful planning. Nowhere is this responsibility more important than at the local education agency level, where dramatic increases in the number of special education students served have recently occurred. It is here that the mandates of state and federal legislation are carried out, that the necessary resources are marshalled, that programs and services are planned for and provided. It is also at the local level that budget crunches are invariably felt, and there are great pressures to use wisely the resources available.

The job of the local education agency is difficult. It must balance many demands: to provide a range of educational programs and services of the highest quality, to reach all children in need, to conserve scarce resources, to utilize personnel effectively, to complement other programs. All of these factors require that local agencies be able to engage in systematic planning efforts, so that they can make informed decisions about the future of their special education programs.

The Local Special Education Planning Model

The Local Special Education Planning Model was designed to provide this kind of planning assistance to local educational agencies. The model is a systematic process for estimating the needs and costs of special education. It provides a framework for gathering, ordering and analyzing relevant information for a district's special education program.

The model uses your own data. You begin by providing information on your district's current special education program, describing it in terms of numbers of students and personnel, types of instructional programs, related and support services, and associated costs. Starting from this base and using the same format, you go on to make estimates for future years, showing shifts that might be expected to occur in the student population, program variations and additions, and desired personnel changes. The data are entered into the computer and a series of eighteen reports are generated which show all current and future costs, student placements, personnel requirements, and program and service configurations of your district's total special education program.

The model does not plan for you; you must make estimates yourself. But it helps you to plan by asking the key questions and by showing you the impact, in terms of dollars, numbers of students and personnel, of your programming decisions. The model is a tool you can use over and over again. You can assess the results of continuing current policies and practices and evaluate changes that might result from new patterns of service. You can modify your initial plan and test alternative proposals. You can update your plan whenever you have new data.

Background and Development of the Model

The Local Special Education Planning Model is based on the resource-cost approach to program planning and cost estimation. The underlying assumption of this approach is that programs and services are composed of resources, and these resources have associated costs. First, resources which comprise each program and service are specified; then the cost of providing each resource is given. The result is not only a total of what the program or service costs, but a specification of how the money is spent. It makes resources explicit and visible, and thereby permits planners to focus on the key elements that make up each program. It also helps make the linkage between programs and costs clear, so that there is no question as to where the dollars go.

Basic research on the resource-cost approach and the application of the approach to planning for special education was conducted previously by the authors under contracts with the Bureau of Education for the Handicapped, U.S. Office of Education. For one project, a state education agency special education planning model, SEPM, was developed and implemented in over thirty states. During the course of implementing SEPM, a number of state directors of special education indicated that such a planning tool could be beneficial in many of their districts. A survey of special education administrators at the local district level, as well as additional state level and federal special education personnel, was subsequently undertaken. The respondents were unanimous in their perception of the need for planning: as the press for services has grown, the requirements for planning have increased. In addition, local administrators expressed the view that while they generally had the information necessary for planning, there was a lack of an adequate system for utilizing the data to plan.

The Local Special Education Planning Model was developed specifically to respond to this need, intended to be implemented and utilized by persons responsible for special education programs at the local district level. A completely new computer program was written to be compatible with local district planning requirements. The program was designed to be installed and operated in local computer facilities. New formats were developed to gather data and allow for direct computer input.

With this User's Manual and the associated computer program, local education agencies can develop their own individual district special education plans using the model.

Setting Up the Program

The Local Special Education Planning Model program is an interactive computer program designed to be set up and utilized on local districts' own data processing equipment. This equipment should include a computer terminal which produces a printed copy, rather than a video display only. The program is writtten in Fortran and is available on a standard computer tape, along with a tape description.

Since the program is intended to be appropriate for use by people without previous computer experience, once the tape is installed, your computer staff should only have to provide technical assistance relative to your own system. This would include directions on how to "log on" and "call up the program," as well as other instructions, such as commands for printing the output. The program itself will prompt you for all data entries.

Operating the Model

The model is operated in several steps, which constitute the succeeding sections of this manual. An overview of these steps follows.

1. Fill out the worksheets.

The model is operated with your district's data. The worksheets provide the formats for gathering and ordering your current data and your planning data—the estimates you make about your future special education program. The worksheets are not intended to be all filled out at one time, but completed in three stages, with computer assistance.

2. Enter the data into the computer.

   The data from the worksheets, both current and projected, are input into the computer terminal directly from the worksheets. Entering the data consists of answering questions: the program asks for the data item by item. You respond by typing in the data from the worksheets. Two tables are generated by the computer during the input process. They are for your use in completing remaining worksheets and making corrections or changes in your previously entered data.

3 Review the reports.

   The computer output consists of a series of eighteen reports, each showing a different aspect of your district's special education program. After you have checked for accuracy to make sure all data were entered correctly, you use the reports to see the impact of your planning decisions.

4. Make alternative projections.

   The first set of reports represents your initial projections, your first "best guess" about the district's future special education program. But you can make as many computer runs as you wish: to test alternative approaches or assumptions, to refine your initial estimates, to update and utilize new available data.

II. COMPLETING THE WORKSHEETS

The process of utilizing the Local Special Education Planning Model begins by filling out a set of worksheets with information on your district. The worksheets are used to gather and organize the data essential to operating the model. They have been designed so they are compatible with the computer program's data entering format: you should be able to enter (input) data directly into the computer terminal using your completed worksheets.

One set of blank worksheets is provided with this manual. So that you will always have a clean blank set of worksheets, use this set as a master from which to make copies for filling in your data. Since the worksheets represent the input format as well as the data gathering format, they are necessary each time the model is operated.

Fill out the worksheets in pencil, so you can make corrections or changes easily. The worksheets are to be used, literally, to work out your plans. While some of your data will reflect actual, current numbers and costs, other information will necessarily be a best guess as to what you expect for the future, and you may want to refine your data as you go along.

Following are descriptions of and directions for completing each of the worksheets. Included are corresponding sample filled-in worksheets of an example LEA plan. They are intended to be used as a guide only, not to suggest any particular program or cost data. Data from the example worksheet set are also used to illustrate the input process and to generate the projections on the computer reports in later sections of this manual.

Worksheet 1

District Information

This worksheet has several purposes. It serves as a cover sheet which will provide basic identification information for the worksheet set as a whole, and it collects information about the district's student population and dollar inflation rates during the years of the planning period.

DISTRICT NAME

Enter the name of the district for which this set of worksheets is being prepared. You may use up to 32 spaces.

AGE GROUP

Enter the age group (or grade levels) for which this set of worksheets is being prepared. The age group could consist of all ages, school age only, particular grades, or any other grouping or age breakdown which is relevant to your planning. If you are planning your total special education program, you will probably want to do one set of worksheets for all ages or grades. In the example, K through 12 is used, but elementary only or secondary only are also possibilities (with separate sets of worksheets for each group). For distinct age groups which are generally not in school, such as preschool or postschool groups, it may be more useful to do separate plans (using separate sets of worksheets), rather than combining them with the in-school population. You may use up to 32 spaces for the age group name.

RUN DESIGNATION

"Run" is a data processing term. When you enter your data into the computer and obtain reports you will be making a computer "run" with the data. The run designation is your identification of the data from this particular set of worksheets: when a computer run is made using these data, all of the reports will be identified as belonging to this data set.

In the example, PLAN 1 was used as the run designation, reflecting a first run for this district for this age group. Subsequent runs might be designated as PLAN 1 HIGH or PLAN 1 LOW, indicating higher cost or lower cost plans, or simply PLAN 2 and so on. Use any run designation which is relevant to your planning, making sure each set of worksheets has its own distinct designation. You may use up to 32 spaces.

YEAR

In the row marked YEAR, enter the years for which planning is to be done. Start with a base year or beginning year for which you feel you have best data on special education students, personnel and program costs. Generally, the base year will be the current year, but may be the prior year if current year data are not available. The computer program will call the beginning year the current year in any event. It will be the first year of your planning period, and you may plan up to 4 more years beyond the first year. When entering the year, use school years; that is, 1982-83, 1983-84. All subsequent worksheets in the set should start with the same current year.

TOTAL STUDENT POPULATION

Total student population refers to all students in the age group designated, both handicapped and non-handicapped, in your district. If the age group is within the school age range, you may use district school enrollments. If you are planning for a preschool or postschool population, total child population data (census figures) will reflect the total number of children in this group in your district.

For the current or beginning year, enter the actual number. For future years, enter an estimated or projected number. The estimated number should reflect the situation particular to your district; that is, whether growth is expected to take place, or a decline in population, or a relatively unchanged number of students expected each year.

In the example, K-12 enrollment figures were used. A student population decrease was estimated to end in school year 1983-84, with a gradual increase thereafter.

INFLATION RATE (%)

The inflation rate is used to indicate the percentage amount that prices rise from the previous year's prices. For planning purposes, many school districts employ a standard rate of inflation by which costs are expected to increase each year. Enter an inflation rate for each year. You may show the inflation rate as being the same throughout the planning period or as fluctuating.

On the computer reports, costs are shown in both constant (current year) and inflated dollars. Although some inflation is usually expected to occur, you do not have to give an inflation rate, in which case all costs will be shown in constant dollars on the reports. Use zeros to indicate no inflation rate.

PREPARED BY

This space is to allow you to list those who had responsibility for preparing the worksheets. This is helpful, particularly for rechecking and updating data.

DATE

When a computer run is made, the date of the run automatically appears on the front of the printout. However, the date on which the data were initially assembled may be important for your records.

Following is the sample filled-in Worksheet 1 for the example LEA plan.

WORKSHEET 1

DISTRICT INFORMATION

DISTRICT NAME: LEA

AGE GROUP: K-12

RUN DESIGNATION: PLAN 1

YEAR	1982 - 83	1983 - 84	1984 - 85	1985 - 86	1986 - 87
TOTAL STUDENT POPULATION	22580	21900	22300	22900	23700
INFLATION RATE (%)	10	12	10.5	9	8

PREPARED BY: ____________ DATE: ____________

Worksheet 2
Special Education Categories

This worksheet is used to show the types and numbers of students which the district currently serves in its special education program. The purpose of gathering these data is to indicate current program status--what kind of special education students are being served and how many--in order to establish the categories by which planning will be done and to provide baseline data on each category.

CATEGORY NAME

Enter the name of each of the categories used to identify students who are eligible to receive special education in your district. These may be the traditional disability categories, such as are generally used for reporting purposes; or they may be those which correspond more to educational arrangement, such as "special class students" or "learning resource students"; or you may use only one category, such as "special education students." Any type of categorization is possible, as long as it is a realistic way of planning for your district and data are available on this basis. The only restraint is that there be no overlap in categories which would result in double counting of children; that is, each child should be assigned to only one category (usually, primary category or primary handicapping condition).

The categories used should be those which reflect the age group for which you are planning. For instance, there are generally fewer types of handicapping conditions served in preschool and postschool populations, so you may want to use a diffferent category scheme when planning for these groups.

When you enter the data from this worksheet into the computer, the program asks for the name of each category served during the current year. But you should also list new categories which you intend to serve in the planning period, such as would occur if your district were to start new programs for multi-handicapped students not previously served.

The order in which you list the categories should be the same on all subsequent worksheets. You may use up to 32 spaces for each category name. If you list more than 15 categories, use a second Worksheet 2, renumbering the category names consecutively.

CURRENT NUMBER SERVED

Enter the number of students served in each of the categories listed during the current (or beginning) year. If no students in the category were served in that year, enter zero.

Again, current year refers to the first year of the planning period, as listed on Worksheet 1, be it the present or prior year. If the first year is the current school year, use the numbers of students presently enrolled. If the first year is last school year, use the enrollment or attendance data for last year.

These data on numbers of students served should represent an unduplicated count of students. Each student should be counted under the primary category or primary handicapping condition only.

The sample filled-in Worksheet 2 follows.

WORKSHEET 2

SPECIAL EDUCATION CATEGORIES

CATEGORY NAME	CURRENT NUMBER SERVED
1. MILD MENTALLY HANDICAPPED	316
2. MODERATE MENTALLY HANDICAPPED	34
3. HEARING IMPAIRED	36
4. SPEECH IMPAIRED	440
5. VISUALLY HANDICAPPED	19
6. EMOTIONALLY HANDICAPPED	29
7. ORTHOPEDIC & HEALTH IMPAIRED	45
8. LEARNING DISABLED	406
9. SEVERELY HANDICAPPED	10
10.	
11.	
12.	
13.	
14.	
15.	

Worksheet 3A

Instructional Programs

Information about the special education instructional programs provided for students in your district is gathered on this worksheet. Each instructional program is described in terms of the specific resources which comprise it and prices are assigned to each resource. In this way, a basic cost per program unit can later be developed as a basis on which to estimate future program costs. A count of the total number of instructional personnel associated with each program is also shown on this worksheet, which will later form the basis on which current personnel/student ratios can be calculated.

PROGRAM NAME

Special education instructional programs are defined as the instructional placements, alternatives or additions to regular education that are provided for special education students. These programs may consist of direct instruction to students and/or indirect instruction to the students' teachers. Instructional programs do not typically include related services, such as therapy or transportation; related services are planned for on the next worksheet. However, sometimes these may be inseparable from the total instructional package, such as when the special education teacher also provides therapy. In these cases, it is probably not necessary for planning purposes to separate out the related services component.

In the PROGRAM NAME column, list all of the different types of special education instructional program options provided for students by your district. Include any new programs which the district intends to start or which may be proposed during the planning period. List those programs staffed by district personnel as well as those run by other agencies but in which the district places students.

List as many distinct programs as you think are appropriate, or about which you wish separate data projections. For instance, you may wish to lump all private agency day programs together if their services and costs to the district are roughly similar; or you may wish to list each agency program separately to reflect their variety. The finer the distinction in listing programs, the more detailed will be your reports, although it will take longer to enter data into the computer.

The order in which you list programs should be the same on all subsequent worksheets, and will appear in this order on the reports. For this reason, it may be useful to list programs in a continuum from least restrictive to more restrictive setting, or district programs first and other agency programs last. You may use up to 32 spaces for each program name. If you list more than 15 programs, use additional Worksheets 3A, renumbering the program names consecutively.

RESOURCES--TYPE

Now consider one unit of each of the instructional programs listed, a unit being the basic instructional module, usually centered around a teacher. A program unit can be thought of as being made up of specific resources, items which comporise the unit and have associated costs. The next question is, what resources are required to provide one unit of each of the instructional programs?

A full-time special class, for instance, may consist of the following resources: teacher, aide, instructional materials, special equipment, classroom maintenance and operation, extra-curricular allowance. Resources can also be shown as budget line items; for example: salaries, benefits, purchased services, supplies and materials, capital outlay.

For instructional programs run by other public and private agencies, the resources required are monetary--the cost to the district or payments the district must provide to purchase the needed special education placement. These may be tuition payments or cost per student payments. One unit of this type of program is one student; the resources for one unit would be the average cost for one student.

Use the resource breakdown appropriate to your district. The finer the distinction in listing resources, the easier it is to see what the various program component costs are. If in your district it is not feasible to break a particular program unit down into specific resources, however, the designation "unit cost," which is the total cost of one unit of the program, will suffice.

Under the heading RESOURCES--TYPE, specify the various resources which comprise one unit of each of the instructional programs listed. You may use up to 32 spaces for each resource, and can list as many resources per program unit as necessary or desired.

RESOURCES--PRICE

Next, assign a price to each resource. The price is the amount it costs the district to provide each resource for the current school year. For instance, if the resources specified are a teacher, an aide, instructional materials and supplies, the prices might be the average annual teacher's salary (for that type of teacher), the average annual aide's salary, and an average annual materials and supplies allotment. For a program which includes a resource of travel by the instructor, the price for that resource might be the annual average travel allowance allotted for this type of instruction.

When aides are one of the resources, give the price for one full-time aide, even if a part-time aide or more than one FTE aide is used per unit. For example, show the annual salary of one aide even if only .5 aide per unit has been specified as the resource for this particular program.

(Resources to be priced typically include only current expense items. Capital expense items, such as buildings, should not be included unless depreciation is taken as an annual expense item.)

For those instructional programs whose resources are shown as a tuition charge or a cost per student, give the average tuition or average cost per one student as the price. If you need to calculate the average cost per student for this program, you can do so by dividing the total cost to the district of the program by the total number of students placed in the program.

In some cases there may be programs for which there is no cost to the district; in these instances enter a zero for price.

For programs not currently provided but which are proposed to begin during the planning period, make an estimate of prices, based on present similar programs. You may wish to confer with collegues who have instituted such programs.

CURRENT NUMBER--TEACHERS

In this column, enter the total number of district teachers, in FTE, allocated to each instructional program for the current year. (The current year, again, is the first year of the planning period as specified on Worksheet 1.) If there are no district teachers, such as when a program is being planned for the future or when the program's resources are shown as an average cost per student, enter zero. As a check, you may wish to total the numbers of teachers to make sure you have accounted for all district special education teachers.

CURRENT NUMBER--AIDES

In this column, enter the total number of district aides, in FTE, allocated to each instructional program for the current year. Enter zero when no aides are included.

The example Worksheet 3A follows.

WORKSHEET 3A

INSTRUCTIONAL PROGRAMS

PROGRAM NAME	RESOURCES		CURRENT NUMBER FTE	
	TYPE	PRICE	TEACHERS	AIDES
1. ITINERANT INSTRUCTION	TEACHER	13300	.1	0
	MATERIALS	500		
	TRAVEL	1000		
2. SPEECH & LANGUAGE	TEACHER	13300	7	0
	MATERIALS	300		
	TRAVEL	800		
	M & O	350		
3. RESOURCE ROOM	TEACHER	14500	10	4
	AIDE	6500		
	MATERIALS	500		
	M & O	1100		
4. SPECIAL CLASS MODERATE	TEACHER	14000	34	19
	AIDE	6500		
	MATERIALS	800		
	M & O	1100		
5. SPECIAL CLASS SEVERE	TEACHER	14500	3	3
	AIDE	6500		
	MATERIALS	1000		
	M & O	500		

WORKSHEET 3A

INSTRUCTIONAL PROGRAMS

(CONT.)

PROGRAM NAME	RESOURCES		CURRENT NUMBER FTE	
	TYPE	PRICE	TEACHERS	AIDES
6. HOME & HOSPITAL	TEACHER MATERIALS TRAVEL	13000 200 800	.5	0
7. OTHER AGENCY DAY SCHOOL	AVERAGE TUITION	4100	0	0
8. RESIDENTIAL SCHOOL	AVERAGE PAYMENT PER STUDENT	5200	0	0
9.				
10.				

Worksheet 3B

Related Services

This worksheet is used to specify the related services which your district provides or is planning to provide during the planning period for special education students. As in the previous worksheet for instructional programs, you first describe related services in terms of the resources which comprise them and then assign a price to each resource in order to arrive at a basic cost per unit of each related service. District personnel providing related services are also shown on this worksheet.

SERVICE NAME

The term related services as used here refers to the additional developmental or corrective services, non-instructional in nature, which may be required to assist the child with a handicap to benefit from instruction. Related services are those services linked to a particular educational need or handicapping condition, such as physical therapy for children with orthopedic impairments. (Services which are to benefit all special education students, such as district administration or diagnostic assessment, are referred to as district support services and are handled on Worksheet 6.)

Related services are generally provided in addition to a special education program placement, but are considered to be distinct from the basic instructional program, inasmuch as they are provided by different personnel.

However, in some districts related servivces may be included as part of a particular instructional program, with the associated costs very difficult to separate, such as when the teacher provides therapy as well as instruction. In this event the related services component is submerged in the instructional program and, for purposes of planning, probably does not need to be broken out. When such is the case, these related services need not be specified separately as they will have been accounted for under the instructional program on Worksheet 3A.

Related services may be provided by personnel hired by the district, or they may be services purchased by the district from service providers. You may wish to lump some similar services together, such as "psychological services," which might include testing, evaluations, therapy and/or parent counseling. Similarly, if a service provider, such as a treatment center or mental health facility, provides a wide variety of services for the district's special education students referred to the center, it may be difficult to attempt to separate out just who gets what services for how long. It may be easier for planning purposes to list the name of the service provider as the related service.

In the SERVICE NAME column, list the types of related services provided for special education students in your district, or which the district proposes to make available in the planning period. The order in which you list services should be the same on all subsequent worksheets, and will appear in this order on the reports. For this reason, you may wish to list district staffed or district run services first. You may use up to 32 spaces for each service name. If you list more than 15 services, use additional Worksheets 3B, renumbering consecutively.

RESOURCES--TYPE

As previously done with instructional programs, consider each of the related services listed in terms of one unit of service. For district staffed services, one unit of a related service would be the basic service module centered around a professional who serves a specific number of students or classes or has a specific caseload. For purchased services or district services for which personnel planning is not needed (such as transportation), one unit is the average amount of service provided for one student.

Each unit of related service can be thought of as being made up of specific resources required to provide the service. For services provided by district personnel and for which personnel planning is necessary, the resources for one unit service might be shown as consisting of: professional, travel allowance, materials and supplies, office space. Resources could also be shown as: salaries, benefits, other direct costs, indirect costs.

For services purchased from other service providers or those district services for which personnel planning is not needed, the resources for one unit of service should be shown as the average cost per student.

Use the resource configurations appropriate to your district. As with instructional programs, the finer the distinction in listing resources, the easier it is to understand expenditures. However, if it is not feasible to break a particular related service down into specific resources, the designation "unit cost," which is the total cost of one unit of service, will suffice.

Under the heading RESOURCES--TYPE, specify the various resources which comprise one unit of each of the related services listed. You may use up to 32 spaces for each resource, and can list as many resources per program as necessary.

RESOURCES--PRICE

Next, assign a price to each resource. The price is the amount it costs the district to provide each resource for the current school year. For instance, if the resources specified were a therapist, equipment and travel, the prices might be the average annual therapist's salary (for that type of professional), average annual equipment expense, and the annual average travel allowance for this type of service.

When aides are one of the resources, give the price for one full-time aide, even if a part-time aide, or more than one FTE aide is used per unit. For example, show the annual salary for one aide even if only .5 aide per unit has been specified as the resource for this particular service.

For those related services whose resources are shown as an average cost per student, you may have to calculate the per student cost. To do this, take the total cost to the district of the service and divide by the number of students who received the service during the current year. For instance, the district may have paid an outside specialist $5000 to provide psychotherapy services for 10 emotionally disturbed students. The average cost per student would then be $500.

In some cases there may be services for which there is no cost to the district; in these instances use a zero for price.

For related services not presently being offered but which are planned to be made available during the planning period, make an estimation of price based on present similar services.

CURRENT NUMBER--PROFESSIONALS

In this column, enter the total number of district professional personnel, in FTE, providing each of the related services for the current year (first year of the planning period as specified on Worksheet 1.) If there are no district professional personnel, such as when a service is being planned for the future or when the service's resources are shown as an average cost per student, enter zero. As a check, you may wish to total the number of district professionals to make sure you have accounted for all district related service personnel.

CURRENT NUMBER--AIDES

In this column, enter the total number of district aides, in FTE, allocated to each of the related services for the current year. (If aides are the only personnel delivering the service, they should be listed in the professional column for that particular service.) Enter zero when no aides are included.

The example Worksheet 3B follows.

WORKSHEET 3B

RELATED SERVICES

SERVICE NAME	RESOURCES		CURRENT NUMBER FTE	
	TYPE	PRICE	PROFSNLS	AIDES
1. PHYSICAL THERAPY	THERAPIST	14000	.5	0
	AIDE	6500		
	EQUIPMENT	500		
	TRAVEL	500		
2. VOCATIONAL COUNSELING	COUNSELOR	15000	1	0
	MATERIALS	300		
	TRAVEL	500		
	M + O	350		
3. TRANSPORTATION	AVERAGE COST PER STUDENT	500	0	0
4. SPECIAL TRANSPORTATION	AVERAGE COST PER STUDENT	800	0	0
5. PSYCHOTHERAPY	ANNUAL COST PER STUDENT	500	0	0

WORKSHEET 3B

RELATED SERVICES

(CONT.)

SERVICE NAME	RESOURCES		CURRENT NUMBER FTE	
	TYPE	PRICE	PROFSNLS	AIDES
6. INTERPRETERS	AVERAGE COST PER STUDENT	250	0	0
7.				
8.				
9.				
10.				

Worksheet 4A

Student Placements in Instructional Programs

Worksheet 4B

Student Placements in Related Services

On these worksheets information is gathered on placements in current and future instructional programs and related services for your district's special education students. The worksheets start with current year data on each category. How many students in each category are being served and what are the programs and services they are receiving for the current year? Then, category by category, future placements are planned for the remaining years ~~in~~ the planning period. How many students are anticipated to be served and in what kinds of programs and services will they be placed?

The worksheets are intended to be completed in two stages—the current year ~~data~~ first, and then, with the aid of computer generated information, the remaining years. First, data for the current year are filled in. At this point, you can stop and enter into the computer all of your data so far from Worksheets 1, 2, 3A, 3B and the partially completed 4As and 4Bs. The computer will then generate a table, INFORMATION FOR WORKSHEET 4A and 4B--CURRENT PLACEMENT STATISTICS. This table shows your current student placements, by category, and a percentage allocation of students to programs and services. The table is for you to check accuracy of information and to help you plan for future programming. Then you can go back and fill in information for the remaining years.

While you do not need to interact with the computer at this time, you will find that the information in the table, particularly the percentages of students in each placement, can be a valuable planning aid. When planning for future programs and services, it is sometimes very useful to visualize a category of students in terms of the percentages allocated to each program or service. Knowing the current percentage distribution of students across programs provides a starting point, something to help you decide what direction to take in the future to approach appropriate services in the least restrictive setting for all students. If you do not utilize the computer to generate the table, it is suggested that you calculate the current allocation percentages yourself and enter them in the space provided on the worksheet.

To be compatible with the computer program's data entering format, do one category at a time, filling in the data for the category on both Worksheets 4A and 4B.

Worksheet 4A

Student Placements in Instructional Programs (Current)

CATEGORY

Use a separate worksheet for each category of students, as listed on Worksheet 2. Enter the name of the category at the top left.

CURRENT PREVALENCE RATE

Current prevalence rate refers to the percentage of students in the total student population who are currently being served under this special education category. The current prevalence rate for each category will be generated by the computer for you as part of the table INFORMATION FOR WORKSHEET 4A and 4B, so you do not need to enter this figure until you have the computer table.

However, if you are going on to plan future years and will not stop to input data, it is suggested that you calculate the prevalence rate yourself. To do this, divide the current number of students in the category (as shown on Worksheet 2) by the current total student population (as shown on Worksheet 1). In the example LEA, there 316 mildly mentally handicapped students out of a total of 22580 students. 316 ÷ 22580 = .0139 or 1.4%.

Prevalence rates are intended to be a general guideline for planning, to see whether the percentage served are reasonable to expect for your district. While it is not unusual to find, especially in an area as small as the typical LEA, that the actual incidence of a particular handicapping condition is legitimately well above or well below the national state average, you may wish to compare your district's prevalence rates with state-wide averages or national prevalence rates for the various special education categories. Prevalence rates might be used for planning as follows: An extremely low prevalence rate for hearing impairments, for example, as compared with national averages, might mean that there are unidentified students in your district, and that you might need to plan for more students in the future. Or, for example, an extremely high prevalence rate for mild mental retardation relative to other states may mean that some students are being inappropriately served by special education and might be transferred to other programs in the future.

A table on the following page shows recent national prevalence rates (special education students served out of the total K-12 student population), as well as two sets of national incidence rates (estimation of expected occurrence of handicapping condition in the student age population).

STUDENT PLACEMENTS

In the row next to the heading STUDENT PLACEMENTS, enter the years in the planning period, starting with the current (or first) school year, as shown on Worksheet 1.

PRIMARY PLACEMENTS

In this column list the instructional programs specified on Worksheet 3A. You can list all of the programs or only those relevant (both currently and being proposed for provision in the future) to this category of students. Be sure to list programs in the same order as on Worksheet 3A, as it is this order the computer will use to prompt you when the data are being input.

PERCENTAGES OF HANDICAPPED STUDENTS

HANDICAPPING CATEGORY	1979 ACTUAL % SERVED	WEIGHTED STATE AVERAGE %	FEDERAL ESTIMATES %
EMR	[2.09	1.81	[2.30
TMR		.40	
Hearing	.20	.29	.58
Speech	2.81	3.56	3.50
Vision	.08	.10	.10
SED	.78	1.03	2.00
Ortho	.16	.20	[.50
OHI	.25	.36	
SLD	3.03	2.56	3.00
Multiple	.16	.17	.06
Total	9.54	10.48	12.04

---

1. Source: Second Annual Report to Congress on the Implementation of Public Law P.L. 94-142: The Education of All Handicapped Children Act. U.S. Department of Education, 1980, p. 166. Data reflect the number of children ages 3-21 served as a percentage of the Fall 1979 enrollment (ages 5-17).

2. Source: William T. Hartman, "Projecting Special Education Costs" (Stanford, CA: Institute for Research on Educational Finance and Governance, Stanford University, 1980), p. 16. The reported incidence rates represent the weighted average of twenty-eight states' estimates of incidence rates.

3. Source: Kaskowitz, David. Validation of States Counts of Handicapped Children, Volume 2: Stanford Research Institute: Menlo Park, CA, 1977, p. 32.

TOTAL UNDUPLICATED NUMBER

Enter the total number of students in the category as shown on Worksheet 2 under CURRENT NUMBER SERVED.

PRIMARY PLACEMENTS--NUMBER

Under this heading in the row next to the appropriate instructional programs, enter the current number of students in the category whose primary placement is in the program. (Current number refers to the number served in the current or first year of the planning period, as specified on Worksheet 1.)

Primary placement would normally be determined by a student's IEP. It is usually the special education instructional program in which most hours are spent. However, when there are students who participate in several distinct special education instructional programs for the same length of time, a decision has to be made about which is the primary placement and which are additional placements, to avoid double counting of students.

When you have entered all students in the category in their current primary instructional placements, add up the numbers. The sum should equal the number shown in the TOTAL UNDUPLICATED NUMBER row.

PRIMARY PLACEMENTS--(%)

The numbers of students placed in each of the instructional programs can be translated into percentages of the total number of students in the category. These percentages indicate the spread of students across programs, and is used to help plan future placements. The computer will generate these percentages for you as part of INFORMATION FOR WORKSHEET 4A and 4B, so you do not need to fill in this column until you have the computer table.

If, however, you are not going to stop to input data, but will go ahead and complete future years' planning, it is suggested that you calculate the percentages yourself. To do this, divide the number of students placed in each of the programs by the total unduplicated number of students in the category. In the example LEA, 221 mildly mentally handicapped students are placed in special class moderate out of a total of 316 mildly handicapped students. 221 ÷ 316 = 0.699 or 70%.

ADDITIONAL PLACEMENTS

In this column list the special education instructional programs which also serve the students in the category in addition to their primary placements. Be sure to include any programs which, while not offered currently to this category, are being planned as additional placements to their primary programs in the future. For instance, speech instruction may not currently be an additional placement for moderately retarded students, but you are planning to place some of these students in speech programs in the future. Keep the same order as the list of primary placement programs above.

ADDITIONAL PLACEMENTS--NUMBER

Under this heading in the row next to the appropriate programs, enter the current number of students in the category who have additional placements in the program.

ADDITIONAL PLACEMENTS--(%)

The percentages of students who receive each of the additional placement programs appear on the computer generated table INFORMATION FOR WORKSHEET 4A and 4B. If you will not have the table before going on to do future years' planning, it is suggested that you calculate the percentages yourself. To do this, divide the number of students shown in each of the additional placements by the total unduplicated number of students in the category. In the example, 35 mildly mentally handicapped students have an additional placement in speech. 35 ÷ 316 = 0.110 or 11%.

These percentage distribution figures can be very useful for planning. In the example, for instance, 35 of the mild mentally handicapped students currently receive speech instruction in addition to their primary placements. This translates into 11% of all mild mentally handicapped students. When viewed this way, 11% may seem a low figure, and may illustrate a need to provide a larger percentage of mild mentally handicapped students with additional speech placements in the future.

Following is the example Worksheet 4A for the category mild mentally handicapped, with current year data only filled in.

WORKSHEET 4A

STUDENT PLACEMENTS IN INSTRUCTIONAL PROGRAMS

CATEGORY: MILD M H

CURRENT PREVALENCE RATE: ________

STUDENT PLACEMENTS	1982-83		1983-84	1984-85	1985-86	1986-87
PRIMARY PLACEMENTS	NUMBER	(%)	NUMBER	NUMBER	NUMBER	NUMBER
1. ITINERANT						
2. SPEECH						
3. RESOURCE ROOM	65					
4. SPECIAL CLASS MOD	221					
5. SPECIAL CLASS SEV						
6. HOME & HOSPITAL						
7. OTHER AGENCY DAY	30					
8. RESIDENTIAL SCHOOL						
9.						
10.						
11.						
12.						
13.						
14.						
15.						
TOTAL UNDUPLICATED NUMBER	316	100%				
ADDITIONAL PLACEMENTS						
1. SPEECH	35					
2.						
3.						
4.						
5.						
6.						
7.						

Worksheet 4B

Student Placements in Related Services (Current)

After you have completed current year data on instructional programs for a category, go on to Worksheet 4B and complete current year data on related services for the category.

CATEGORY

Use a separate worksheet for each category of students. Enter the name of the category at the top left. Complete a Worksheet 4B for each category as listed on Worksheet 2, unless there are categories which do not and are not anticipated in the future to receive related services.

CURRENT PREVALENCE RATE

This will be the same figure as that on Worksheet 4A for the category.

STUDENT PLACEMENTS

In the row next to the heading STUDENT PLACEMENTS, enter the years in the planning period, starting with the current school year (the beginning year, as shown on Worksheet 1).

RELATED SERVICES

In this column list the related services, specified on Worksheet 3B, which are currently provided and those which you plan to provide in the future for this category of students. Be sure to list services in the same order as on Worksheet 3B, because the computer will use this order to prompt you when the data are being input.

RELATED SERVICES--NUMBER

Under this heading in the row next to the appropriate related services, enter the current number of students in the category who receive the service. (Current number refers to the number served in the current or first year of the planning period, as specified on Worksheet 1.)

RELATED SERVICES--(%)

The number of students receiving each of the related services represent percentages of the total number of students in the category. This gives an indication of the proportion of students in the category who receive each type of related service relative to the category as a whole.

The computer will generate these percentages for you as part of INFORMATION FOR WORKSHEET 4A and 4B. However, if you will not have the table before going on to do future years' planning, it is suggested that you calculate the percentages yourself. To do this, divide the number of students receiving each related service by the total unduplicated number of students in the category (as shown on the appropriate Worksheet 4A, as well as Worksheet 2). In the example LEA, there are 62 mildly mentally handicapped students receiving vocational counseling out of a total of 316 mildly handicapped students. 62   316 = 0.196 or 20%.

Following is the example Worksheet 4B for the category mild mentally handicapped, with current year data only.

WORKSHEET 4B

STUDENT PLACEMENTS IN RELATED SERVICES

CATEGORY: MILD M H

CURRENT PREVALENCE RATE: ______

STUDENT PLACEMENTS	1982-83		1983-84	1984-85	1985-86	1986-87
RELATED SERVICES	NUMBER	(%)	NUMBER	NUMBER	NUMBER	NUMBER
1. VOCATIONAL COUNS	62					
2. TRANSPORTATION	103					
3.						
4.						
5.						
6.						
7.						
8.						
9.						
10.						
11.						
12.						
13.						
14.						
15.						

Information for Worksheet 4A and 4B
Current Placement Statistics

When current year data have been filled in on Worksheet 4A and 4B for all categories, you can begin interacting with the computer program. At this point you can enter into the computer all of your data so far. These would be the completed Worksheets 1, 2, 3A and 3B, and the current year data on Worksheets 4A and 4B.

The computer will then generate the table INFORMATION FOR WORKSHEET 4A and 4B--CURRENT PLACEMENT STATISTICS. There is a table for each category of students. The tables should first be checked for accuracy to make sure all information--categories, programs and services--are as you intended and that the numbers match your worksheets. Make corrections if necessary, or changes, if you have new data. Be sure to record any changes on the corresponding worksheets, as the worksheets should remain the original reference source.

Then use the tables to complete Worksheets 4A and 4B, filling in the current prevalence rates and the allocation percentages for primary placements, additional placements and related services for each category.

Before you start your session with the computer, be sure to read Section III, ENTERING THE DATA.

Following are the tables for two categories from the example LEA plan, mild mentally handicapped and moderate mentally handicapped.

INFORMATION FOR WORKSHEET 4A AND 4B

CURRENT PLACEMENT STATISTICS

CATEGORY: MILD MENTALLY HANDICAPPED
CURRENT PREVALENCE RATE = 1.399%
TOTAL IN CATEGORY = 316.

PRIMARY PROGRAM PLACEMENT		
ITINERANT INSTRUCTION	0.%	0.
SPEECH & LANGUAGE	0.%	0.
RESOURCE ROOM	21.%	65.
SPECIAL CLASS MODERATE	70.%	221.
SPECIAL CLASS SEVERE	0.%	0.
HOME & HOSPITAL	0.%	0.
OTHER AGENCY DAY SCHOOL	9.%	30.
RESIDENTIAL SCHOOL	0.%	0.
ADDITIONAL PLACEMENT		
ITINERANT INSTRUCTION	0.%	0.
SPEECH & LANGUAGE	11.%	35.
RESOURCE ROOM	0.%	0.
SPECIAL CLASS MODERATE	0.%	0.
SPECIAL CLASS SEVERE	0.%	0.
HOME & HOSPITAL	0.%	0.
OTHER AGENCY DAY SCHOOL	0.%	0.
RESIDENTIAL SCHOOL	0.%	0.
RELATED SERVICES		
PHYSICAL THERAPY	0.%	0.
VOCATIONAL COUNSELING	20.%	62.
TRANSPORTATION	33.%	103.
SPECIAL TRANSPORTATION	0.%	0.
PSYCHOTHERAPY	0.%	0.
INTERPRETERS	0.%	0.

CATEGORY: MODERATE MENTALLY HANDICAPPED
CURRENT PREVALENCE RATE = 0.151%
TOTAL IN CATEGORY = 34.

PRIMARY PROGRAM PLACEMENT		
ITINERANT INSTRUCTION	0.%	0.
SPEECH & LANGUAGE	0.%	0.
RESOURCE ROOM	0.%	0.
SPECIAL CLASS MODERATE	35.%	12.
SPECIAL CLASS SEVERE	0.%	0.
HOME & HOSPITAL	0.%	0.
OTHER AGENCY DAY SCHOOL	35.%	12.
RESIDENTIAL SCHOOL	29.%	10.
ADDITIONAL PLACEMENT		
ITINERANT INSTRUCTION	0.%	0.
SPEECH & LANGUAGE	35.%	12.
RESOURCE ROOM	0.%	0.
SPECIAL CLASS MODERATE	0.%	0.
SPECIAL CLASS SEVERE	0.%	0.
HOME & HOSPITAL	0.%	0.
OTHER AGENCY DAY SCHOOL	0.%	0.
RESIDENTIAL SCHOOL	0.%	0.
RELATED SERVICES		
PHYSICAL THERAPY	0.%	0.
VOCATIONAL COUNSELING	0.%	0.
TRANSPORTATION	35.%	12.
SPECIAL TRANSPORTATION	0.%	0.
PSYCHOTHERAPY	0.%	0.
INTERPRETERS	0.%	0.

Worksheet 4A

Student Placements in Instructional Programs (Anticipated)

After you have completed the current year information for each category and have entered the prevalence rates and program allocation percentages, fill in numbers of students for the remaining years in the planning period, one category at a time. This is where planning is done: there are no hard data and you must make estimates using your own knowledge of the district, your own and other's professional judgments, and best guesses about the future.

TOTAL UNDUPLICATED NUMBER

Start on Worksheet 4A at the row TOTAL UNDUPLICATED NUMBER. How many students in this category do you anticipate will be placed in special education instructional programs for the next year? In the remaining years of the planning period?

Take a look at Worksheet 1 to see whether total student population in this age group is projected to increase, decrease or stay about the same. This will give you an idea about corresponding changes in the special education population. Will your district be engaging in vigorous childfind activities, or are there plans to enlarge diagnostic capabilities? If so, you might expect an increase in special education students. Look on the top of Worksheet 4A at the current prevalence rate for the category. Compare it with the table in the previous section showing percentages of handicapped students for this category. Does the prevalence rate seem high, low or about average? If it seems very high, it may be because your district is a center for programs for this type of handicapping condition, but it could also mean that students are being misclassified, and you might want to show lower numbers for this category in the future (as well as taking steps to investigate this phenomenon). If the prevalence rate seems low, might it be because there are children in need of services? If so, you may want to plan for more students in the future.

After considering the various factors which might have a bearing on the number of students in the category in the future, fill in the total student numbers for each year in the planning period. Choose the numbers which seem realistic to you now, remembering that you can always change them if you wish.

PRIMARY PLACEMENTS--NUMBER

Now, taking the total number of students anticipated in the category, distribute these students among the instructional programs.

Again, you will have to make guesses about how many students will be placed in each program. Use the current year allocation percentages as a guide. Would you like to see proportionally more students of this category being served in less restrictive settings in future years? For example, you might want to move some students out of special classes and into resource rooms, or place in district schools students currently in other agency programs. Consider other trends too. Are there plans in your district to start school-based classes for students of this category who are currently institutionalized; for example, blind students or severely handicapped students? Is the district planning to implement new programs (as would be specified in Worksheet 3A), such as a learning resources program, which could serve as a primary placement for some of the students in this category?

Take into account the timing when shifting numbers of students from one program to another. If there are large numbers who will be placed in new programs, you may want to plan the shift gradually over a period of several years to allow time for the programs to be adequately staffed. Conversely, you may wish to phase out a program entirely for this category, showing the decrease in several stages.

In the rows next to the appropriate instructional programs, enter your estimates of the numbers of students in the category whose primary placement is anticipated to be in the program. Be sure the numbers for each year add up to the total unduplicated number for the year, so that all students in the category are accounted for.

ADDITIONAL PLACEMENTS--NUMBER

Under this heading in the rows next to the appropriate programs, enter your estimates of the numbers of students in the categeory who are anticipated to have additional placements in the program.

Again, this will be your best guess, but current year percentages should give you some guidance. For example, should proportionally more students of this category receive speech instruction in addition to their primary placement in the future? Consider overall plans too. For instance, would the addition of itinerant instructional services provided to some students whose primary placements are in resource rooms help to keep these children mainstreamed? Finally, can the programs be established quickly or gradually? You may need to spread anticipated growth slowly over the planning period.

Following is the completed example Worksheet 4A for the category mild mentally handicapped.

WORKSHEET 4A

STUDENT PLACEMENTS IN INSTRUCTIONAL PROGRAMS

CATEGORY: MILD MH

CURRENT PREVALENCE RATE: 1.4 %

STUDENT PLACEMENTS	1982 - 83		1983-84	1984-85	1985-86	1986-87
PRIMARY PLACEMENTS	NUMBER	(%)	NUMBER	NUMBER	NUMBER	NUMBER
1. ITINERANT				5	5	5
2. SPEECH						
3. RESOURCE ROOM	65	21	95	140	175	210
4. SPECIAL CLASS MOD	221	70	220	215	210	210
5. SPECIAL CLASS SEV						
6. HOME & HOSPITAL						
7. OTHER AGENCY DAY	30	9	25	20	10	
8. RESIDENTIAL SCHOOL						
9.						
10.						
11.						
12.						
13.						
14.						
15.						
TOTAL UNDUPLICATED NUMBER	316	100%	340	380	400	425
ADDITIONAL PLACEMENTS						
1. SPEECH	35	11	45	70	90	100
2.						
3.						
4.						
5.						
6.						
7.						

Worksheet 4B

Student Placements in Related Services (Anticipated)

After you have finished planning instructional program placements for a category on Worksheet 4A, go on to Worksheet 4B and plan the related service placements for the category. To begin, enter the current year percentages of students allocated to each related service, then go on to the next year column.

RELATED SERVICES-NUMBER

In the rows next to the related services, enter your estimates of the numbers of students in the category who are anticipated to receive the service in the remaining years of the planning period.

Start with the current allocation percentages to see the proportion of students who receive each related service. Do the proportions seem high or low? In the example LEA, for instance, 20% of mild mentally handicapped students receive vocational counseling in the current year, a figure which would indicate that only a small proportion of high school age students receive the service. It was therefore planned that more students would receive this service in the future.

Planning for related services is closely tied with instructional program planning, so be sure to coordinate with Worksheet 4A for the category. For example, if in the future, your district will be providing school-based programs for deaf or blind students who are currently at residential schools, you might expect increased need for related services for these groups. Similarly, increased numbers of physically handicapped students in school-based programs will probably mean more students in need of related services, such as physical therapy. If the number of emotionally handicapped students served by the district is anticipated to grow--due to increased diagnostic efforts and/or establishment of more instructional options for these students--there will probably be a concomitant need for related services for this group. Or, you may simply decide to provide a certain related service, such as recreational therapy or counseling, to all students in the category.

The need for certain related services may decrease for some categories. For instance, if more hearing impaired or visually handicapped students become accustomed to mainstream programs, their need for special transportation may decrease, and fewer numbers would need this service.

If you think it will take time to gear up for new services or increased numbers in existing services, be sure to show increases gradually over the planning period.

Following is the completed example Worksheet 4B for the category mildly mentally handicapped.

WORKSHEET 4B

STUDENT PLACEMENTS IN RELATED SERVICES

CATEGORY: MILD M H

CURRENT PREVALENCE RATE: 1.4 %

STUDENT PLACEMENTS	1982 - 83		1983-84	1984-85	1985-86	1986-87
RELATED SERVICES	NUMBER	(%)	NUMBER	NUMBER	NUMBER	NUMBER
1. VOCATIONAL COUNS	62	20	90	120	150	170
2. TRANSPORTATION	103	33	100	100	100	100
3.						
4.						
5.						
6.						
7.						
8.						
9.						
10.						
11.						
12.						
13.						
14.						
15.						

Information for Worksheet 5

Current Personnel Ratios

When you have completed planning for the remaining years on Worksheets 4A and 4B for all categories, enter these data into the computer. If you have not yet input any of your data, this is a good time to do so. After all data so far are entered, the computer will generate the table, INFORMATION FOR WORKSHEET 5, PERSONNEL RATIOS, which is used to help plan future personnel needs. Please be sure to read Section III, ENTERING THE DATA, before you begin your session at the computer terminal.

On the following page is the computer generated table, INFORMATION FOR WORKSHEET 5, PERSONNEL RATIOS, for the example LEA.

INFORMATION FOR WORKSHEET 5
PERSONNEL RATIOS

CURRENT STUDENT/TEACHER AND AIDE/TEACHER RATIOS

PROGRAM	S/T RATIO	A/T RATIO
ITINERANT INSTRUCTION	40. : 1	0.00 : 1
SPEECH & LANGUAGE	73. : 1	0.00 : 1
RESOURCE ROOM	28. : 1	0.40 : 1
SPECIAL CLASS MODERATE	13. : 1	0.56 : 1
SPECIAL CLASS SEVERE	7. : 1	1.00 : 1
HOME & HOSPITAL	10. : 1	0.00 : 1
OTHER AGENCY DAY SCHOOL	0. : 1	0.00 : 1
RESIDENTIAL SCHOOL	0. : 1	0.00 : 1
PHYSICAL THERAPY	20. : 1	0.000 : 1
VOCATIONAL COUNSELING	67. : 1	0.000 : 1
TRANSPORTATION	0. : 1	0.000 : 1
SPECIAL TRANSPORTATION	0. : 1	0.000 : 1
PSYCHOTHERAPY	0. : 1	0.000 : 1
INTERPRETERS	0. : 1	0.000 : 1

Worksheet 5

Personnel Ratios

This worksheet is used to gather data on personnel ratios and to do personnel planning for the special education programs and services for which the district hires staff. Data on current personnel ratios are shown first to give an indication of the personnel situation in the beginning year of the planning period. You can use the computer generated table of current personnel ratios to obtain these data. Then you specify the personnel ratios desired by the last year of the planning period. The computer will use these data to calculate future personnel requirements (with any changes occurring in even increments from the current ratios to the desired ratios in the ending year).

INSTRUCTIONAL PROGRAMS

Under this heading list all of those special education instructional programs (specified on Worksheet 3A) for which the district hires teachers or other salaried personnel. (You do not need to list programs for which district special education personnel planning is not necessary, such as other agency programs.) Be sure to include any new programs which will be district staffed during the planning period. List programs in the same order as previously.

STUDENT/TEACHER RATIOS--CURRENT

A student/teacher ratio refers to the average number of students who are served by one teacher.

Under this heading enter the current student/teacher ratios for each of the instructional programs listed. These figures will be found on the computer generated table INFORMATION FOR WORKSHEET 5--PERSONNEL RATIOS. They were calculated using the data on total numbers of teachers given on Worksheet 3A and the current program placement figures on Worksheets 4A.

If you do not have the computer table to refer to, calculate the student/teacher ratio for each program. To do this, use your Worksheets 4A. Program by program, add together all students in all categories who are currently placed in each of the instructional programs you have just listed. Be sure to add in additional placements as well as primary placements. This will give you the total number of students in each program. Then, divide each of these program totals by the current number of teachers shown for the program on Worksheet 3A. This yields an average class size, or caseload, for each program. With the addition of a colon (:) and a one (1), this becomes a ratio of so many students to one teacher. In the example LEA, a total of 280 students (of various categories) had resource room placements. 280 ÷ 10 teachers = 28 students per resource room teacher, or 28:1.

AIDE/TEACHER RATIOS--CURRENT

The aide/teacher ratio refers to the average number of aides per teacher.

Under this heading enter the current ratios of aides to teachers for each of the instructional programs listed. You can use the figures from the current personnel ratios table, rounding numbers as appropriate. (In the example, for instance, .559 of an aide per teacher of the special class moderate program is shown on the table. On the example Worksheet 5 this was rounded to the nearest one-half FTE, or .5.)

This fractional figure, by the way, can indicate more than one situation. It can mean that there is one half-time aide per special class moderate, or that only half of the special classes moderate have full-time aides, or even that some of the classes have no aides while others have more than one FTE aide.

If you do not have the computer table to refer to, calculate the aide/teacher ratio for each program. To do this, use your Worksheet 3A. Consider only those programs which currently have aides. Divide the current number of aides shown for the program by the current number of teachers shown for the program. This will yield a fraction (decimal) of an aide per each teacher if there are fewer aides than teachers, a one-to-one ratio if there are an equal number, or a number greater than one if there are more aides than teachers. You can convert these numbers into ratios with the addition of a colon (:) and a one (1), showing so much of an aide per one teacher, or so many aides per one teacher. In the example LEA, there were 10 resource room teachers and 4 resource room aides. 4 ÷ 10 = .4 or .4:1.

RELATED SERVICES

Under this heading list all of those related services (specified on Worksheet 3B) for which the district hires staff and for which personnel planning is necessary. (You need not include district services for which personnel planning is not necessary, such as transportation, or services purchased from non-district personnel.) Be sure to include any new services which will be district staffed during the planning period. List related services in the same order as previously.

STUDENT/PROFESSIONAL RATIOS--CURRENT

Student/professional ratio refers to the average number of students who are served by one professional.

Under this heading enter the current student/professional ratios for each of the related services listed. These figures will be found on INFORMATION FOR WORKSHEET 5--PERSONNEL RATIOS. They were calculated using the data on total numbers of professionals given on Worksheet 3B and the current related service placement figures on Worksheets 4B.

If you do not have the computer table to refer to, calculate the student/professional ratio for each related service. To do this, use your Worksheets 4B. Service by service, add together all students in all categories who receive each of the related services you have just listed. This will give you the total number of students for each service. Then, divide each of these service totals by the current number of professionals shown for the service on Worksheet 3B. This will yield an average caseload for each related service. With the addition of a colon (:) and a one (1), this becomes a ratio of so many students to one professional. In the example LEA, there were 67 students receiving vocational counseling and 1 professional. 67 ÷ 1 = 67:1.

AIDE/PROFESSIONAL RATIOS--CURRENT

Aide/professional ratio refers to the average number of aides per professional.

Under this heading enter the current ratios of aides to professionals for each of the related services listed. You can use the figures from the current personnel ratios table, rounding numbers as appropriate.

If you do not have the computer table to refer to, calculate the aide/professional ratio for each related service. To do this, use your Worksheet 3B. Consider only those services which currently have aides. Divide the current number of aides shown for the service by the current number of professionals shown for the service. This will yield a fraction (decimal) of an aide per each professional, a one-to-one ratio if there are an equal number, or a number greater than one if there are more aides than professionals. You can convert these numbers into ratios with the addition of a colon (:) and a one (1), showing so much of an aide per one professional, or so many aides per one professional.

INSTRUCTIONAL PROGRAMS

STUDENT/TEACHER RATIOS--DESIRED

After you have entered current professional ratios, go on to plan desired ratios.

In this column, specify the student/teacher ratios you would like to have, or you think are feasible to expect, for each program by the last year of the planning period. (The computer program does not require that you enter the last part of the ratio--:1--so you can specify only the first number, the number of students per teacher, if you wish.)

Student/teacher ratios are perhaps the most important single factor affecting costs, as well as being crucial to program quality. But this is a planning model, and the first plan need not be the only plan. The decisions you make as to personnel ratios for your first computer run can always be changed for subsequent runs after you see their impact.

When you start to plan, look first at the current ratios. Is there a need for change in any of them? Do they seem too high; that is, are there too many students per teacher? Or too low? Are they in compliance with state maximum or minimum class size regulations?

Consider each of the different instructional programs separately; then look at the anticipated future placement patterns for the various categories on Worksheets 4A. Will more severely handicapped students (coming from institutions or other agency programs) be placed in special classes? This could mean that there should be fewer students per teacher for these classes to allow for the increased time and attention their needs require. Will there be more varied and involved learning problems to be dealt with by your consulting or resource teachers? Will speech teachers be working with students whose handicapping conditions are more severe or unfamiliar? When students with handicaps not previously addressed in these programs are to be served by these teachers, a compensating lowering of the student/teacher ratio may be called for. The extra work involving special education teachers--IEP planning and associated meetings, inservice, parent conferences--could also be a factor to consider when planning future student/teacher ratios.

On the other hand, you may anticipate a need to lower costs, and could justifiably raise the student/teacher ratio for some programs. In this case, since aides are relatively less expensive than teachers, you might want to consider whether the addition of an aide (or a second aide) per unit would allow you to maintain the present student/teacher ratio or to serve more students in the unit. Look also at the additional placements on Worksheets 4A. Will special class students be receiving speech or other instruction, formerly provided by the special class teacher, from other specialists? This could make a higher student/teacher ratio feasible for special classes.

Be sure to give student/teacher ratios for any proposed new district programs, currently unstaffed, in which you are going to be placing students.

AIDE/TEACHER RATIOS--DESIRED

In this column, enter the ratios of aides to teachers, which you would like to have, or you think are feasible to expect, for each instructional program by the last year of the planning period. You can show a decimal fraction of an aide per teacher, a one-to-one ratio, or a number greater than one aide per teacher. (You do not need to enter the :1 part of the expression.)

In planning for aides, consider again future placement patterns on Worksheets 4A. Will more severely handicapped students be placed in special classes? This might indicate a higher aide to teacher ratio. Will resource rooms be serving more students with difficult learning needs and handicaps? The addition of an aide or aides might be beneficial here too. Consider the planned student/teacher ratio . Will class sizes be large due to budget or other constraints? An extra aide may help maintain the larger class. Will class sizes decrease, in which case the aide/teacher ratio could also decrease? Or perhaps, parent volunteers might be used to assist in some classes, which could indicate a lowering of the aide/teacher ratio for these programs.

RELATED SERVICES

STUDENT/PROFESSIONAL RATIOS--DESIRED

In this column, enter the student/professional ratios you would like to have, or you think are feasible to expect, by the end of the planning period for each related service listed. (You do not need to enter the :1 part of the expression.)

Again, as in planning for instructional personnel, assess the current situation. Do caseloads seem high or low? Do they meet state guidelines?

Look at the Worksheets 4B. Is it anticipated that there will be students with more severe or varied handicapping conditions being provided with related services? This might indicate a need for lower student/professional ratios. A lower caseload might also be considered in order to give professionals adequate time to prepare for and attend IEP meetings and parent conferences. In addition, some professionals' caseloads require time spent visiting many schools in the district; others can see their students at fewer sites. The student/professional ratios for these services may reflect those different situations.

Be sure to show student/professional ratios for any new district related services, currently unstaffed, which you are planning to provide.

AIDE/PROFESSIONAL RATIOS--DESIRED

In this column, enter the ratios of aides to professionals which you would like to have, or you think are feasible to expect, by the end of the planning period for each related service. Aides can be shown in fractions (decimals) of an aide per professional, as a one-to-one ratio, or as a number greater than one aide per professional. (You do not need to enter the :1 part of the expression.)

Factors to consider when planning for related services aides include new or increased demands which might be placed on professionals due to increasing complexity of student need, severity of handicapping conditions served, increased paperwork and/or larger caseloads per se. If you think aides might be able to alleviate some of the burdens on professionals, you might want to raise the aide/professional ratio or plan for their inclusion in delivering related services which had not previously included aides.

The example Worksheet 5 follows.

WORKSHEET 5

PERSONNEL RATIOS

INSTRUCTIONAL PROGRAMS	STUDENT/TEACHER RATIOS		AIDE /TEACHER RATIOS	
	CURRENT	DESIRED	CURRENT	DESIRED
1. ITINERANT	40	25		
2. SPEECH	73	55		
3. RESOURCE ROOM	28	20	.4	1
4. SPECIAL CLASS M	13	12	.5	1
5. SPECIAL CLASS S	7	5	1	1
6. HOME & HOSPITAL	10	8		
7.				
8.				
9.				
10.				
11.				
12.				
13.				
14.				
15.				

RELATED SERVICES	STUDENT/PROFSNL RATIOS		AIDE /PROFSNL RATIOS	
	CURRENT	DESIRED	CURRENT	DESIRED
1. PHYSICAL THERAPY	20	15		1
2. VOCATIONAL COUNS	67	50		
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				
13.				
14.				
15.				

Worksheet 6
District Support Services

Information on your district's special education support services is specified on this worksheet. As done previously for instructional programs and related services, district support services are described in terms of the resources which comprise one unit of service and a price is assigned to each resource. Planning support services for future years is also done on this worksheet by specifying the desired service levels for each year in the planning period.

SERVICE NAME

The term district support services refers to those services which back-up, facilitate and support the total district special education program. They are provided to benefit all special education students (as opposed to related services, which are services linked to a particular handicap or learning need) and, as such, do not constitute a "placement" for special education students. Planning for these services cuts across all categories of student need and is based on characteristics of the district's total special education program. Some examples of district support services are: administration, assessment, childfind, inservice, due process hearings and curriculum and program development.

In the SERVICE NAME column, enter the name of each of the support services your district provides. You can lump some services together for convenience if you wish, such as all administrative services under one heading; or you can separate distinct portions under separate names, such as supervisory services and consultant services. Use whatever scheme fits your district's requirements. Be sure to include any new support services you wish to implement during the planning period. You may use up to 32 spaces for each service name.

RESOURCES--TYPE

As with instructional programs and related services, consider each of the district support services you have listed in terms of one unit of service, then specify the resources which comprise one unit.

Since district support services are so varied, first decide what you want to define as one unit for each of the services. The unit of service concept for district support services encompasses three broad types:

One unit can be thought of as the basic service module which can provide service to a prescribed maximum or minimum area, number of schools or teachers or students or parents.

One unit can also be thought of as the total amount of a particular service provided by the district over the school year.

One unit can also be one student's-worth of service, or one teacher's-worth or program's-worth.

Some examples of the above types are:

One unit of assesssment might be a diagnostic team which can serve a specified number of students per year; or one unit of assessment might be a total yearly cost paid by the district to a diagnostic center; or one unit of assessment might be the annual average cost per student for assessment services. (In the example, the diagnostic team includes purchased services as well.)

One unit of inservice might be the total cost to the district of all inservice programs; or one unit might consist of the salaries and related expenses of district staff members hired to run inservice programs; or one unit of inservice might be the average cost per teacher inserviced.

One unit of due process hearings might be the total cost to the district over the school year of all due process hearings; or one unit might be the average cost per hearing.

One unit of consultant services might consist of one consultant who provides service to a specific number of teachers, schools, students or programs; or one unit might be all the consultants as a group, plus expenses, who serve a specific area, handicap or program; or one unit might also be thought of as the annual average cost per student or teacher for consultant services.

One unit of childfind might be the total cost to the district of all childfind activities for the year; or one unit might be broken down into staff (FTE) salaries allotted to childfind activities, plus expenses.

One unit of administration might be the entire district special education administrative staff and expenses; or one unit might be the chief administrator and related expenses only.

The units of service chosen for each of the district support services should be those which are easiest for you to visualize and plan with, compatible to your district's support service delivery system. The manner in which a unit of service is defined then gives you an idea of the type of resources involved. For some services, you may want to specify resources minutely; for others, a "total cost" per unit or "average cost" per student or teacher or program resource designation may be more appropriate. Making finer resource distinctions (that is, specifying in detail the major items of expenditure per unit of service) allows for more precise planning, but this need not be carried to the point of making exhaustive lists. If you are, however, specifying resources in some detail, be sure to describe the service unit desired by the end of the planning period. For instance, if you are planning to add another staff member on a particular service team, specify that staff member as part of the unit.

In the RESOURCES--TYPE column, enter the resource designation for each district support service. You may use up to 32 spaces for each resource, and can list as many resources as necessary.

RESOURCES--PRICE

Next, assign a price to each resource, the amount that it costs the district to provide the resource for one year.

If you are specifying distinct resources, use annual averages as appropriate, such as the annual average salary for psychologists, or the average travel allowance per year.

When the resource designation is "total cost" per unit, give the total cost to the district to provide the service for the current year.

When the resource designation is "average cost" per student or teacher or program, give the current annual average cost to the district to provide the service for one student, teacher or program. (If you need to calculate this amount, take the total cost of the service and divide it by the number of students or teachers or parents or programs receiving the service over the year. For instance, the district may have paid outside service providers $10,000 over the year to provide inservice for 50 teachers. The average cost per teacher would then be $200 per teacher.)

SERVICE LEVELS

Service levels are a means by which the current and anticipated amounts of each of the district support services can be shown. The service level is expressed as a number, the number of units of service provided or available. The numbers used to show the level for a particular service correspond to the resources designated for that service.

When the resources for one unit of service are separately specified (as in the example), the service level for the current year would be the total number of units of that particular service currently operating or available in the district. For example, if the resource designation is a team, the current service level would be the number of teams in the district for the current year. The number could be a whole number; it could also be fractional, such as when some team members are proposed to be part of the unit but will not be hired until a later year in the planning period.

When the resource designation is "total cost" per unit, such as the total annual cost for inservice, the current year service level would be 1 (one), as that is the only unit of service provided.

When the resource designation is "average cost," such as the average cost per student for assessment, the current year service level would be the total number of units (in this case, students) receiving the service during the current year.

To indicate service levels on the worksheet, first fill in the years of the planning period, as specified on Worksheet 1, starting with the current or first year. Then, enter the current service levels—the current number of units of service—for each district support service. Be sure the number entered corresponds to the type of resource designation comprising the service unit.

The numbers you enter as the current service levels reflect the situation in the beginning year; future years' planning consists of making any changes in service levels—showing increases, decreases or no change. Planning district support services for the upcoming years involves much of the same reliance on your own judgment of trends and future conditions as did planning for instructional programs and related services, and it is closely tied to your previous planning decisions.

Look again at Worksheet 1. Is total student population expected to change? A projected increase in total population may call for additional units of support service. For example, you might plan to add another diagnostic team to provide assessment services to the larger expected number of students. Are there population decreases projected? You might want to reduce the number of units of some services.

Look at Worksheets 4A and 4B. Did you previously consider the prevalence rate low (or high) for any category? This could indicate a need for increased (or decreased) childfind activities. Are new district programs for more severely handicapped students being planned? This could call for additional units of support services, such as consultant services. Is it anticipated that substantial numbers of previously under-served categories of students, such as emotionally disturbed and multiply handicapped, for example, will be attending district classes? This might mean a need to increase the service level for some support services, such as parent counseling. Will more special education students be placed in mainstream settings? This could mean higher service levels for in-service training. Do you anticipate more hearings in the future, or perhaps an initial rise and then a gradual decline? Could the addition of more parent coordinators help reduce the number of hearings?

Consider timing, too, so that changes in service level can correspond to the changes you have planned on Worksheets 4A and 4B in the placement of students in instructional programs and the provision of related services.

Enter your estimates of the anticipated service levels for each district support service for the remaining years in the planning period. You can specify fractional (decimal) amounts, as well as whole numbers, to indicate service levels.

NUMBER OF STAFF/UNIT

In this column next to each district support service, enter the number of district personnel, in FTE, which comprise one unit of service. You can list professional personnel only, or include other district staff as well, and you can enter the number of staff per unit even if you have not shown staff separately as part of the resource designation. This figure will be used to calculate future personnel requirements for district support services, so be sure to include any planned staff additions to what you want to be the basic service unit.

The example Worksheet 6 follows.

WORKSHEET 6

DISTRICT SUPPORT SERVICES

SERVICE NAME	RESOURCES		SERVICE LEVELS					NUMBER OF STAFF/ UNIT
	TYPE	PRICE	1982-83	1983-84	1984-85	1985-86	1986-87	
1. DISTRICT ADMINISTRATION	SE SUPERVISOR	25000	1	1	1	1	1	1
	CLERICAL	10000						
	TRAVEL	3000						
	M & O	1000						
2. SPECIAL ED CONSULTANTS	CONSULTANT	18000	2	3	4	5	6	1
	CLERICAL	5000						
	TRAVEL	2000						
	M & O	1000						
3. PARENT COORDINATORS	COORDINATOR	15000	0	1	1	2	2	1
	CLERICAL	5000						
	TRAVEL	2000						
	M & O	1000						
4. INSERVICE TRAINING	TOTAL ANNUAL COST	50000	1	1.5	1.5	1.8	2	0

WORKSHEET 6

DISTRICT SUPPORT SERVICES
(CONT.)

SERVICE NAME	RESOURCES		SERVICE LEVELS					NUMBER OF STAFF/ UNIT
	TYPE	PRICE	1982-83	1983-84	1984-85	1985-86	1986-87	
5. DIAGNOSTIC TEAM	PSYCHOLOGIST SOCIAL WORKER D/P TEACHER S&L THERAPIST	20000 15000 18000 18000	1	1.5	2	2.5	3	4
~~6.~~	MATERIALS TRAVEL CLERICAL M&O	5000 4000 10000 2000						
~~7.~~	PURCHASED SERVICES	10000						
~~8.~~ 6. DUE PROCESS HEARINGS	AVERAGE COST PER HEARING	1200	12	10	10	8	8	0

III. ENTERING THE DATA

The Local Special Education Planning Model is designed for the data to be entered in three separate sessions.

First, the data from Worksheets 1, 2, 3A, 3B and the current year data on Worksheets 4A and 4B are entered. Then a table, INFORMATION FOR WORKSHEET 4A AND 4B—CURRENT PLACEMENT STATISTICS, is generated by the computer. Next, the data from the balance of Worksheets 4A and 4B are entered. This will produce another table, INFORMATION FOR WORKSHEET 5—PERSONNEL RATIOS. Finally, the data from Worksheets 5 and 6 are entered.

While you can enter data in one long session, the three session format is specifically set up so that you can make use of the current information tables generated by the computer to aid in completing the worksheets. It is also a good idea to check the accuracy of your input at several stages and make any corrections.

As discussed earlier in the first section of this manual under Setting Up the Program, you should have for your use a computer terminal which produces a printed copy rather than a video screen display only. Log on and call up the program according to your own system's procedures.

The first questions you will be asked are whether you are continuing with a partially entered data set, or changing a previously entered data set. If you answer no, then the program will begin at Worksheet 1. If your answer is yes, then the computer will ask what the last complete worksheet was which was input to the program. After your response, the program will start at the next worksheet. (You can log off at any time.

When you return to the terminal, start after the last completed worksheet.)

The data to operate the model are entered worksheet by worksheet in an interactive fashion; that is, you interact with the program via the computer terminal as you enter the data. The program is, in effect, a series of questions asked by the computer. After you have typed in your response, it automatically goes on to the next question.

There are several rules for data entry, as follows: Since the program requires a response to each question, always be sure to enter a response, using a zero if that is the appropriate answer. Do not use commas (,) when entering numbers. Do not use the dollar sign symbol ($). When entering percentages (%), enter the whole number, rather than the decimal fraction; for example, ten percent would be 10, not .10. Do not enter the percent symbol (%).

After the computer generated tables (INFORMATION FOR WORKSHEET 4A AND 4B and INFORMATION FOR WORKSHEET 5) there is an automatic break in the program, allowing you to end the session to complete further worksheets. If you wish to go on and not log off, you may do so.

What happens if you make a typing error or other mistake? If you catch a mistake before you press the return key, you can simply backspace and correct. If you enter a word or letter when a numeral is called for, or an inappropriate symbol, the computer will generally not go on when you press the return key, but simply sit there waiting for the proper response. It will ask you to re-enter the data when it picks up significant mathematical errors.

Otherwise, the logical time to make corrections is when you log back on at the start of a new session, as you can begin the session at the worksheet in which the error occurred. However, when you indicate to the computer that you wish to replace a worksheet, all succeeding worksheets which you have already entered must be re-entered. This is useful if the error or change you wish to make must be followed through with changes in later worksheets.

To avoid having to re-enter data for all worksheets, however, you can make corrections by calling up the data file and changing the lines which are in error. Check with your own computer staff for the procedures used in your system to do this.

If you make any changes in the data themselves during the input process, be sure to record these changes on the corresponding worksheets. The original worksheets should contain all the data you input into the computer. They are a reference against which you check the computer output for accuracy.

When all data have been entered, the computer will ask if you would like to replace a worksheet. If your answer is no, the computer is ready to process your data and print the reports. For the specific commmands to do this on your system, consult your computer staff.

The following pages show portions of the actual input of the data from the example worksheet set. All of the data came directly from the worksheets.

```
ARE YOU CONTINUING WITH A PARTIALLY ENTERED
DATA SET (Y OR N) ?
N

ARE YOU CHANGING A PREVIOUSLY
ENTERED DATA SET (Y OR N) ?
N

WORKSHEET 1
DISTRICT INFORMATION
ENTER THE DISTRICT NAME
LEA

ENTER THE AGE GROUP
K - 12

ENTER THE RUN DESIGNATION
PLAN 1

ENTER THE CURRENT YEAR
1982 - 83

HOW MANY YEARS DO YOU WANT TO PLAN AHEAD?
(MAXIMUM OF 4)
4

ENTER THE TOTAL STUDENT POPULATION
FOR THE EACH OF THE FOLLOWING YEARS:

1982-83
22580

1983-84
21900

1984-85
22300

1985-86
22900

1986-87
23700

ENTER THE INFLATION RATE (%)
FOR THE EACH OF THE FOLLOWING YEARS:

1982-83
10

1983-84
12

1984-85
10.5

1985-86
9

1986-87
8
```

```
1

WORKSHEET 2
SPECIAL EDUCATION CATEGORIES

ENTER THE NAME OF EACH CATEGORY SERVED DURING THE CURRENT YEAR AND THE NUMBER OF
STUDENTS IN EACH CATEGORY SERVED DURING THE CURRENT YEAR:

ENTER THE CATEGORY NAME (ENTER XXXX WHEN FINISHED)
MILD MENTALLY HANDICAPPED

ENTER THE CURRENT NUMBER OF STUDENTS SERVED
316

ENTER THE CATEGORY NAME (ENTER XXXX WHEN FINISHED)
MODERATE MENTALLY HANDICAPPED

ENTER THE CURRENT NUMBER OF STUDENTS SERVED
34

ENTER THE CATEGORY NAME (ENTER XXXX WHEN FINISHED)
HEARING IMPAIRED

ENTER THE CURRENT NUMBER OF STUDENTS SERVED
36

ENTER THE CATEGORY NAME (ENTER XXXX WHEN FINISHED)
SPEECH IMPAIRED

ENTER THE CURRENT NUMBER OF STUDENTS SERVED
440

ENTER THE CATEGORY NAME (ENTER XXXX WHEN FINISHED)
VISUALLY HANDICAPPED

ENTER THE CURRENT NUMBER OF STUDENTS SERVED
19

ENTER THE CATEGORY NAME (ENTER XXXX WHEN FINISHED)
EMOTIONALLY HANDICAPPED

ENTER THE CURRENT NUMBER OF STUDENTS SERVED
29

ENTER THE CATEGORY NAME (ENTER XXXX WHEN FINISHED)
ORTHOPEDIC & HEALTH IMPAIRED

ENTER THE CURRENT NUMBER OF STUDENTS SERVED
45

ENTER THE CATEGORY NAME (ENTER XXXX WHEN FINISHED)
LEARNING DISABLED

ENTER THE CURRENT NUMBER OF STUDENTS SERVED
406

ENTER THE CATEGORY NAME (ENTER XXXX WHEN FINISHED)
SEVERELY HANDICAPPED

ENTER THE CURRENT NUMBER OF STUDENTS SERVED
10

ENTER THE CATEGORY NAME (ENTER XXXX WHEN FINISHED)
XXXX
```

```
WORKSHEET 3A
INSTRUCTIONAL PROGRAMS

ENTER INFORMATION ABOUT INSTRUCTIONAL PROGRAMS

ENTER THE PROGRAM NAME (ENTER XXXX WHEN ALL PROGRAMS HAVE BEEN ENTERED)
ITINERANT INSTRUCTION

ENTER THE TYPE OF RESOURCE
(ENTER XXXX WHEN ALL RESOURCES FOR THE PROGRAM HAVE BEEN ENTERED)
TEACHER

ENTER THE PRICE OF ONE
13300

ENTER THE TYPE OF RESOURCE
(ENTER XXXX WHEN ALL RESOURCES FOR THE PROGRAM HAVE BEEN ENTERED)
MATERIALS

ENTER THE PRICE OF ONE
500

ENTER THE TYPE OF RESOURCE
(ENTER XXXX WHEN ALL RESOURCES FOR THE PROGRAM HAVE BEEN ENTERED)
TRAVEL

ENTER THE PRICE OF ONE
1000

ENTER THE TYPE OF RESOURCE
(ENTER XXXX WHEN ALL RESOURCES FOR THE PROGRAM HAVE BEEN ENTERED)
XXXX

ENTER THE TOTAL NUMBER OF TEACHERS (FTE) CURRENTLY ALLOCATED TO THIS PROGRAM
.1

ENTER THE TOTAL NUMBER OF AIDES (FTE) CURRENTLY ALLOCATED TO THIS PROGRAM
0
```

```
WORKSHEET 3B
RELATED SERVICES

ENTER INFORMATION ABOUT RELATED SERVICES

ENTER THE SERVICE NAME (ENTER XXXX WHEN ALL SERVICES HAVE BEEN ENTERED)
PHYSICAL THERAPY

ENTER THE TYPE OF THE RESOURCE
 (ENTER XXXX WHEN ALL RESOURCES FOR THE SERVICE HAVE BEEN ENTERED)
THERAPIST

ENTER THE PRICE OF ONE
14000

ENTER THE TYPE OF THE RESOURCE
 (ENTER XXXX WHEN ALL RESOURCES FOR THE SERVICE HAVE BEEN ENTERED)
AIDE

ENTER THE PRICE OF ONE
6500

ENTER THE TYPE OF THE RESOURCE
 (ENTER XXXX WHEN ALL RESOURCES FOR THE SERVICE HAVE BEEN ENTERED)
EQUIPMENT

ENTER THE PRICE OF ONE
500

ENTER THE TYPE OF THE RESOURCE
 (ENTER XXXX WHEN ALL RESOURCES FOR THE SERVICE HAVE BEEN ENTERED)
TRAVEL

ENTER THE PRICE OF ONE
500

ENTER THE TYPE OF THE RESOURCE
 (ENTER XXXX WHEN ALL RESOURCES FOR THE SERVICE HAVE BEEN ENTERED)
XXXX

ENTER THE TOTAL NUMBER OF PROFESSIONAL
PERSONNEL CURRENTLY ALLOCATED TO THIS SERVICE
.5

ENTER THE TOTAL NUMBER OF AIDES
CURRENTLY ALLOCATED TO THIS SERVICE
0
```

```
WORKSHEET 6
DISTRICT SUPPORT SERVICES

ENTER INFORMATION ABOUT THE RESOURCES  ALLOCATED TO DISTRICT SUPPORT SERVICES:

ENTER THE SERVICE NAME
(ENTER XXXX WHEN WHEN ALL SERVICES HAVE BEEN ENTERED)

DISTRICT ADMINISTRATION

ENTER THE TYPE OF THE RESOURCE
(ENTER XXXX WHEN ALL RESOURCES FOR THIS SERVICE HAVE BEEN ENTERED
S E SUPERVISOR

ENTER THE PRICE OF ONE
25000

ENTER THE TYPE OF THE RESOURCE
(ENTER XXXX WHEN ALL RESOURCES FOR THIS SERVICE HAVE BEEN ENTERED
CLERICAL

ENTER THE PRICE OF ONE
10000

ENTER THE TYPE OF THE RESOURCE
(ENTER XXXX WHEN ALL RESOURCES FOR THIS SERVICE HAVE BEEN ENTERED
TRAVEL

ENTER THE PRICE OF ONE
3000

ENTER THE TYPE OF THE RESOURCE
(ENTER XXXX WHEN ALL RESOURCES FOR THIS SERVICE HAVE BEEN ENTERED
M & O

ENTER THE PRICE OF ONE
1000

ENTER THE TYPE OF THE RESOURCE
(ENTER XXXX WHEN ALL RESOURCES FOR THIS SERVICE HAVE BEEN ENTERED
XXXX

ENTER SERVICE LEVELS FOR EACH YEAR

1982-83
1

1983-84
1

1984-85
1

1985-86
1

1986-87
1

ENTER THE NUMBER OF STAFF PEOPLE
1
```

```
WORKSHEET 4A AND 4B
CURRENT STUDENT PLACEMENT

MILD MENTALLY HANDICAPPED
TOTAL STUDENTS =      316.
ENTER THE NUMBER OF STUDENTS IN THIS CATEGORY WHOSE PRIMARY PRIMARY PLACEMENT IS
 IN:

ITINERANT INSTRUCTION
0

SPEECH & LANGUAGE
0

RESOURCE ROOM
65

SPECIAL CLASS MODERATE
221

SPECIAL CLASS SEVERE
0

HOME & HOSPITAL
0

OTHER AGENCY DAY SCHOOL
30

RESIDENTIAL SCHOOL
0


ENTER THE NUMBER OF STUDENTS IN THIS
CATEGORY WHO HAVE ADDITIONAL PLACEMENTS IN:

ITINERANT INSTRUCTION
0

SPEECH & LANGUAGE
35

RESOURCE ROOM
0

SPECIAL CLASS MODERATE
0

SPECIAL CLASS SEVERE
0

HOME & HOSPITAL
0

OTHER AGENCY DAY SCHOOL
0

RESIDENTIAL SCHOOL
0


ENTER RELATED SERVICES
PLACEMENTS FOR MILD MENTALLY HANDICAPPED

PHYSICAL THERAPY
0

VOCATIONAL COUNSELING
62

TRANSPORTATION
103

SPECIAL TRANSPORTATION
0

PSYCHOTHERAPY
0

INTERPRETERS
0
```

ENTER INFORMATION ABOUT THE ANTICIPATED NUMBERS AND PLACEMENTS OF STUDENTS

CATEGORY: MILD MENTALLY HANDICAPPED

FOR THE YEAR 1983-84

ENTER THE ANTICIPATED NUMBER
OF STUDENTS IN THIS CATEGORY
340

ENTER THE ANTICIPATED NUMBER OF STUDENTS IN THIS CATEGORY WHOSE PRIMARY
PLACEMENT WILL BE IN:

ITINERANT INSTRUCTION
0

SPEECH & LANGUAGE
0

RESOURCE ROOM
95

SPECIAL CLASS MODERATE
220

SPECIAL CLASS SEVERE
0

HOME & HOSPITAL
0

OTHER AGENCY DAY SCHOOL
25

RESIDENTIAL SCHOOL
0

ENTER THE ANTICIPATED NUMBER OF STUDENTS IN THIS CATEGORY WHO WILL HAVE ADDITIONAL PLACEMENTS IN:

ITINERANT INSTRUCTION
0

SPEECH & LANGUAGE
45

RESOURCE ROOM
0

SPECIAL CLASS MODERATE
0

SPECIAL CLASS SEVERE
0

HOME & HOSPITAL
0

OTHER AGENCY DAY SCHOOL
0

RESIDENTIAL SCHOOL
0

ENTER THE ANTICIPATED NUMBER OF STUDENTS IN THE CATEGORY
WHO WILL RECEIVE RELATED SERVICES:

PHYSICAL THERAPY
0

VOCATIONAL COUNSELING
90

TRANSPORTATION
100

SPECIAL TRANSPORTATION
0

PSYCHOTHERAPY
0

INTERPRETERS
0

```
WORKSHEET 5
PERSONNEL RATIOS

ENTER THE PERSONNEL RATIOS YOU WOULD LIKE TO
HAVE AT THE END OF THE PLANNING PERIOD

ITINERANT INSTRUCTION
STUDENT/TEACHER RATIO
25

AIDE/TEACHER RATIO
0

SPEECH & LANGUAGE
STUDENT/TEACHER RATIO
55

AIDE/TEACHER RATIO
0

RESOURCE ROOM
STUDENT/TEACHER RATIO
20

AIDE/TEACHER RATIO
1

SPECIAL CLASS MODERATE
STUDENT/TEACHER RATIO
12

AIDE/TEACHER RATIO
1

SPECIAL CLASS SEVERE
STUDENT/TEACHER RATIO
5

AIDE/TEACHER RATIO
1

HOME & HOSPITAL
STUDENT/TEACHER RATIO
8

AIDE/TEACHER RATIO
0

OTHER AGENCY DAY SCHOOL
STUDENT/TEACHER RATIO
0

AIDE/TEACHER RATIO
0

RESIDENTIAL SCHOOL
STUDENT/TEACHER RATIO
0

AIDE/TEACHER RATIO
0

PHYSICAL THERAPY
STUDENT/PROFESSIONAL RATIO
15

AIDE/PROFESSIONAL RATIO
1

VOCATIONAL COUNSELING
STUDENT/PROFESSIONAL RATIO
50

AIDE/PROFESSIONAL RATIO
0

TRANSPORTATION
STUDENT/PROFESSIONAL RATIO
0

AIDE/PROFESSIONAL RATIO
0

SPECIAL TRANSPORTATION
STUDENT/PROFESSIONAL RATIO
0

AIDE/PROFESSIONAL RATIO
0
```

IV. REVIEWING THE REPORTS

There are eighteen reports produced by the computer from the data you enter. These reports show your inputs--the data from the worksheets--as well as the projections—the results of the computer calculations upon your data. The reports are as follows:

Report 1	District Information
Report 2	Number of Students by Category
Report 3	Number of Students by Program and Service
Report 4	Projected Student Numbers and Placements
Report 5	Program and Service Description
Report 6	Personnel Ratios
Report 7	Number of Personnel by Category
Report 8	Number of Personnel by Program and Service
Report 9	Costs by Category
Report 10	Costs by Programs and Services
Report 11	Costs per Student by Category--Instructional Programs
Report 12	Costs per Student by Category--Related Services
Report 13	Total Costs per Student by Category
Report 14	Costs per Student by Program and Service
Report 15	Summary by Category
Report 16	Summary by Program and Service
Report 17	District Support Services Description
Report 18	District Support Services

As you go through the reports, those which contain your input data should be checked for accuracy against your original worksheets to make sure all data were input correctly.

Following are the output reports produced from the example data, along with a brief description of each report.

Report 1

District Information

This report gives input data from Worksheet 1. It shows total student population for each year in the planning period ("expected district enrollment" is the term used in the report) and the annual inflation rate expected during the planning period. This information should be checked for accuracy against Worksheet 1.

The report also shows the cumulative inflation, which is the effect of the inflation rate compounded over the years. In the example, for instance, inflation alone by the final year will cause a 48.4% increase in costs over the first year.

Basic identification information is shown in the upper right hand corner of this and all reports. This consists of the district name, the age group, run designation and a report page number.

REPORT 1
DISTRICT INFORMATION

	1982-83	1983-84	1984-85	1985-86	1986-87
TOTAL STUDENT POPULATION	22580.	21900.	22300.	22900.	23700.
INFLATION RATE	10.0%	12.0%	10.0%	9.0%	8.0%
CUMULATIVE INFLATION	0.0%	10.0%	23.2%	35.5%	47.7%

Report 2

Number of Students by Category

This report shows the unduplicated number of students in each category who will be served in each year of the planning period and the total number of special education students served each year. The category names and the data under the current year column come originally from Worksheet 2. Succeeding years' information comes from Worksheet 4A (TOTAL UNDUPLICATED NUMBER) for each category. This information should be checked for accuracy against the appropriate worksheets.

The report also shows both current (first year) and final year prevalence rates for each category and for the special education population in total. The prevalence rate is the percentage of special education students in the total student population. In the example, the total prevalence rate for all categories is projected to increase from approximately 6% to approximately 9.5%. This means the district proposes to identify and serve in special education an additional 3.5% of their total student population by the final year of the planning period.

REPORT 2
NUMBER OF STUDENTS BY CATEGORY
(UNDUPLICATED COUNT)

	PREVALENCE						
	CURRENT	FINAL	1982-83	1983-84	1984-85	1985-86	1986-87
MILD MENTALLY HANDICAPPED	1.399%	1.793%	316.	340.	380.	400.	425.
MODERATE MENTALLY HANDICAPPED	0.151%	0.232%	34.	40.	45.	50.	55.
HEARING IMPAIRED	0.159%	0.295%	36.	45.	55.	65.	70.
SPEECH IMPAIRED	1.949%	2.996%	440.	500.	570.	640.	710.
VISUALLY HANDICAPPED	0.084%	0.105%	19.	20.	22.	24.	25.
EMOTIONALLY HANDICAPPED	0.128%	1.013%	29.	70.	120.	180.	240.
ORTHOPEDIC & HEALTH IMPAIRED	0.199%	0.380%	45.	55.	65.	75.	90.
LEARNING DISABLED	1.798%	2.532%	406.	450.	500.	550.	600.
SEVERELY HANDICAPPED	0.044%	0.105%	10.	15.	18.	25.	25.
TOTALS	5.912%	9.451%	1335.	1535.	1775.	2009.	2240.

Report 3

Number of Students by Program and Service

This report shows the number of students assigned to each program for each year. This is a duplicated count; that is, if students have placements in more than one program, they are counted again. The report gives a related services count as well, showing the number of students to receive related services for each year. There are separate totals for each year.

The report also gives two final year percentages. The first column shows what percentage of all special education students are assigned to each program in the final year. This tells you, for instance, that 45% of all special education students will receive speech and language instruction in the final year; or that 28% will be placed in special classes. The second column of percentages gives the percentage these placements represent in the total district student population (both handicapped and non-handicapped). This shows, for example, that 3% of the total district enrollment will be in resource rooms by the final year; or that 4% will be receiving speech and language instruction.

The same final year percentages are given for related services: the first shows the percentage of all special education students who receive the service; the second shows the percentage of students who receive the service out of the total district student population.

REPORT 3

NUMBER OF STUDENTS BY PROGRAM AND SERVICE
(DUPLICATED COUNT)

TYPE OF PROGRAM OR SERVICE	% OF STUDENTS (FINAL YEAR) SPEC. ED	DISTRICT	1982-83	1983-84	1984-85	1985-86	1986-87
INSTRUCTIONAL PROGRAMS							
ITINERANT INSTRUCTION	3.795%	0.359%	4.	22.	42.	60.	85.
SPEECH & LANGUAGE	45.536%	4.304%	508.	620.	758.	891.	1020.
RESOURCE ROOM	32.366%	3.059%	280.	381.	518.	645.	725.
SPECIAL CLASS MODERATE	25.670%	2.426%	446.	464.	489.	519.	575.
SPECIAL CLASS SEVERE	2.455%	0.232%	20.	27.	31.	45.	55.
HOME & HOSPITAL	0.223%	0.021%	5.	5.	5.	5.	5.
OTHER AGENCY DAY SCHOOL	4.018%	0.380%	116.	118.	111.	96.	90.
RESIDENTIAL SCHOOL	0.893%	0.084%	35.	31.	27.	22.	20.
TOTAL DUPLICATED COUNT FOR PGMS	114.955%	10.865%	1414.	1668.	1981.	2283.	2575.
RELATED SERVICES							
PHYSICAL THERAPY	1.116%	0.105%	10.	15.	20.	25.	25.
VOCATIONAL COUNSELLING	8.036%	0.759%	67.	95.	130.	160.	180.
TRANSPORTATION	12.277%	1.160%	146.	159.	185.	216.	275.
SPECIAL TRANSPORTATION	1.563%	0.148%	10.	20.	25.	35.	35.
PSYCHOTHERAPY	0.893%	0.084%	3.	8.	15.	20.	20.
INTERPRETERS	0.446%	0.042%	0.	12.	12.	10.	10.
TOTAL RELATED SERVICES COUNT	24.330%	2.303%	236.	309.	387.	466.	545.

Report 4

Projected Student Numbers and Placements

There is a separate Report 4 for each category of special education students listed on Worksheet 2. The category name is shown at the top left. Next, the current prevalence rate for the category is given; that is, the percentage this category of student represents in the total district student population during the first year. Then the final year prevalence rate is shown; that is, the percentage that the district anticipates it may be serving in the last year of the planning period.

The report shows the annual program placements for the category for each year of the planning period, both primary and additional placements. Since these numbers are input data from Worksheet 4A for this category, they should be checked for accuracy. Related service placements are also shown and should be checked with the appropriate Worksheets 4B.

The report also gives beginning and ending year percentages of students assigned to each program. This is a way of seeing, at a glance, the distribution of the category—where students are placed now and where they will be placed in the future. In the example, for instance, 70% of the mild mentally handicapped students had their primary placements in special classes in 1982-83. By 1986-87, however, it was planned to serve only 49% in special classes. The shifts in program placements easily become apparent when viewed in this way.

REPORT 4
PROJECTED STUDENT NUMBERS AND PLACEMENTS

MILD MENTALLY HANDICAPPED CURRENT PREVALANCE RATE 1.40% FINAL PREVALANCE RATE 1.79%

	PERCENT OF STUDENTS		STUDENTS				
	1982-83	1986-87	1982-83	1983-84	1984-85	1985-86	1986-87
PRIMARY PROGRAM PLACEMENT							
ITINERANT INSTRUCTION	0.%	1.%	0.	0.	5.	5.	5.
SPEECH & LANGUAGE	0.%	0.%	0.	0.	0.	0.	0.
RESOURCE ROOM	21.%	49.%	65.	95.	140.	175.	210.
SPECIAL CLASS MODERATE	70.%	49.%	221.	220.	215.	210.	210.
SPECIAL CLASS SEVERE	0.%	0.%	0.	0.	0.	0.	0.
HOME & HOSPITAL	0.%	0.%	0.	0.	0.	0.	0.
OTHER AGENCY DAY SCHOOL	9.%	0.%	30.	25.	20.	10.	0.
RESIDENTIAL SCHOOL	0.%	0.%	0.	0.	0.	0.	0.
TOTAL IN CATEGORY (UNDUPLICATED)	100.%	100.%	316.	340.	380.	400.	425.
ADDITIONAL PROGRAM PLACEMENT							
ITINERANT INSTRUCTION	0.%	0.%	0.	0.	0.	0.	0.
SPEECH & LANGUAGE	11.%	24.%	35.	45.	70.	90.	100.
RESOURCE ROOM	0.%	0.%	0.	0.	0.	0.	0.
SPECIAL CLASS MODERATE	0.%	0.%	0.	0.	0.	0.	0.
SPECIAL CLASS SEVERE	0.%	0.%	6.	0.	0.	0.	0.
HOME & HOSPITAL	0.%	0.%	0.	0.	0.	0.	0.
OTHER AGENCY DAY SCHOOL	0.%	0.%	0.	0.	0.	0.	0.
RESIDENTIAL SCHOOL	0.%	0.%	0.	0.	0.	0.	0.
TOTAL DUPLICATED COUNT	111.%	124.%	35.	45.	70.	90.	100.

RELATED SERVICES

PHYSICAL THERAPY	0.%	0.%	0.	0.	0.	0.	0.
VOCATIONAL COUNSELING	20.%	40.%	62.	90.	120.	150.	170.
TRANSPORTATION	33.%	24.%	103.	100.	100.	100.	100.
SPECIAL TRANSPORTATION	0.%	0.%	0.	0.	0.	0.	0.
PSYCHOTHERAPY	0.%	0.%	0.	0.	0.	0.	0.
INTERPRETERS	0.%	0.%	0.	0.	0.	0.	0.

Report 5

Program and Service Description

This report presents the instructional program and related service descriptive information from Worksheets 3A and 3B, and should be checked for accuracy against these worksheets. The report shows the resources used for each program and service and the current price of each resource.

In addition, there is a current price per unit given to indicate how much one unit of the instructional program or related service cost the district during the beginning year of the planning period. Then, under the column FINAL PRICE, the cost of providing one unit of the program or service during the final year is shown. This final year figure includes the effects of inflation and any resource changes (such as additional aide FTE available per program) which have been specified. A comparison of the current and final prices shows how the cost per unit is expected to change over time.

This report (as well as others which show input data, particularly Reports 1, 2, 6 and 17), are very important, inasmuch as they reveal the basic planning assumptions. When there are questions as to why future program cost projections appear as they do, this report can be used to understand and illustrate why certain programs cost more or less and what goes into each program and service.

REPORT 5

PROGRAM AND SERVICE DESCRIPTION

INSTRUCTIONAL PROGRAMS	RESOURCES	CURRENT PRICE	FINAL PRICE
ITINERANT INSTRUCTION	TEACHER	13300.	
ITINERANT INSTRUCTION	MATERIALS	500.	
ITINERANT INSTRUCTION	TRAVEL	1000.	
TOTAL		14800.	21802.
SPEECH & LANGUAGE	TEACHER	13300.	
SPEECH & LANGUAGE	MATERIALS	300.	
SPEECH & LANGUAGE	TRAVEL	800.	
SPEECH & LANGUAGE	M & O	350.	
TOTAL		14750.	21700.
RESOURCE ROOM	TEACHER	14500.	
RESOURCE ROOM	AIDE	6500.	
RESOURCE ROOM	MATERIALS	500.	
RESOURCE ROOM	M & O	1100.	
TOTAL		18700.	33304.
SPECIAL CLASS MODERATE	TEACHER	14000.	
SPECIAL CLASS MODERATE	AIDE	6500.	
SPECIAL CLASS MODERATE	MATERIALS	800.	
SPECIAL CLASS MODERATE	M & O	1100.	
TOTAL		19532.	33009.

SPECIAL CLASS SEVERE	TEACHER	14500.	
SPECIAL CLASS SEVERE	AIDE	6500.	
SPECIAL CLASS SEVERE	MATERIALS	1000.	
SPECIAL CLASS SEVERE	P & O	550.	
TOTAL		22550.	33310.
HOME & HOSPITAL	TEACHER	13000.	
HOME & HOSPITAL	MATERIALS	200.	
HOME & HOSPITAL	TRAVEL	800.	
TOTAL		14000.	20689.
OTHER AGENCY DAY SCHOOL	AVERAGE TUITION	4100.	
TOTAL		4100.	6056.
RESIDENTIAL SCHOOL	AVERAGE PAYMENT PER STUDENT	5200.	
TOTAL		5200.	7681.
RELATED SERVICES			
PHYSICAL THERAPY	THERAPIST	14000.	
PHYSICAL THERAPY	AIDE	6500.	
PHYSICAL THERAPY	EQUIPMENT	500.	
PHYSICAL THERAPY	TRAVEL	500.	
TOTAL		21500.	31759.
VOCATIONAL COUNSELING	COUNSELOR	15000.	
VOCATIONAL COUNSELING	MATERIALS	300.	
VOCATIONAL COUNSELING	TRAVEL	500.	
VOCATIONAL COUNSELING	P & O	350.	

TOTAL		16150.	23956.
TRANSPORTATION	AVERAGE COST PER STUDENT	500.	
TOTAL		500.	739.
SPECIAL TRANSPORTATION	AVERAGE COST PER STUDENT	800.	
TOTAL		800.	1182.
PSYCHOTHERAPY	ANNUAL COST PER STUDENT	500.	
TOTAL		500.	739.
INTERPRETERS	AVERAGE COST PER STUDENT	250.	
TOTAL		250.	369.

Report 6

Personnel Ratios

This report shows the student/teacher and aide/teacher ratios for instructional programs, as well as the personnel ratios (student/professional, aide/professional) for related services.

The current ratios were previously calculated and printed out in the table INFORMATION FOR WORKSHEET 5—PERSONNEL RATIOS during the input process. The desired ratios come from worksheet 5, and should be checked for accuracy.

While the report does not show them, the intermediate years' ratios are straight line interpolations between the current and desired ratios.

This report shows your planning assumptions; it illustrates an important segment of the data base which the computer uses to calculate the personnel requirement projections shown in later reports. As such, the report can be used to see what were chosen as appropriate student/personnel or aide/personnel ratios for a particular program or service.

REPORT 6
PERSONNEL RATIOS

	STUDENT/TEACHER RATIO CURRENT	STUDENT/TEACHER RATIO DESIRED	AIDE/TEACHER RATIO CURRENT	AIDE/TEACHER RATIO DESIRED
INSTRUCTIONAL PROGRAMS				
ITINERANT INSTRUCTION	40.09 : 1	25.00 : 1	0.00 : 1	0.00 : 1
SPEECH & LANGUAGE	72.57 : 1	55.00 : 1	0.00 : 1	0.00 : 1
RESOURCE ROOM	26.00 : 1	20.00 : 1	0.40 : 1	1.00 : 1
SPECIAL CLASS MODERATE	13.12 : 1	12.00 : 1	0.56 : 1	1.00 : 1
SPECIAL CLASS SEVERE	6.67 : 1	5.00 : 1	1.00 : 1	1.00 : 1
HOME & HOSPITAL	10.00 : 1	8.00 : 1	0.00 : 1	0.00 : 1
OTHER AGENCY DAY SCHOOL	0.00 : 1	0.00 : 1	0.00 : 1	0.00 : 1
RESIDENTIAL SCHOOL	0.00 : 1	0.00 : 1	0.00 : 1	0.00 : 1

	STUDENT/PROFSNL RATIO CURRENT	STUDENT/PROFSNL RATIO DESIRED	AIDE/PROFSNL RATIO CURRENT	AIDE/PROFSNL RATIO DESIRED
RELATED SERVICES				
PHYSICAL THERAPY	20.00 : 1	15.00 : 1	0.00 : 1	1.00 : 1
VOCATIONAL COUNSELING	67.60 : 1	50.00 : 1	0.00 : 1	0.00 : 1
TRANSPORTATION	0.00 : 1	0.00 : 1	0.00 : 1	0.00 : 1
SPECIAL TRANSPORTATION	0.00 : 1	0.00 : 1	0.00 : 1	0.00 : 1
PSYCHOTHERAPY	0.00 : 1	0.00 : 1	0.00 : 1	0.00 : 1
INTERPRETERS	0.00 : 1	0.00 : 1	0.00 : 1	0.00 : 1

Report 7

Number of Personnel by Category

This report shows the number of personnel (FTE) required to provide the instructional programs and related services for each cateagory of student for each year of the planning period.

There are three totals: the total number of instructional personnel required, the total number of related service personnel required, and a total of all personnel. (In this latter total, other professionals are included with teachers.)

The number of teachers is derived from calculations based on the numbers of students in each category and the student/teacher ratios for the programs in which the category has placements. This is done for each year. The number of aides is calculated from the aide/teacher ratio applied to the number of teachers in each of the programs in which students from the category are placed. Fractional personnel have been rounded to the nearest whole number.

This report is used primarily to answer questions such as: How many teachers are needed to serve the district's population of learning disabled students? How many teachers and aides will be needed to serve all severely handicapped students?

REPORT 7
NUMBER OF PERSONNEL BY CATEGORY

	1982-83	1983-84	1984-85	1985-86	1986-87
INSTRUCTIONAL PROGRAMS [illegible]					
MILD MENTALLY HANDICAPPED					
TEACHERS	25.	21.	24.	27.	30.
AIDES	10.	0.	0.	0.	30.
MODERATE MENTALLY HANDICAPPED					
TEACHERS	1.	2.	3.	4.	6.
AIDES	1.	0.	0.	0.	5.
HEARING IMPAIRED					
TEACHERS	1.	2.	3.	3.	4.
AIDES	1.	0.	0.	0.	2.
SPEECH IMPAIRED					
TEACHERS	7.	8.	10.	12.	14.
AIDES	0.	0.	0.	0.	2.
VISUALLY HANDICAPPED					
TEACHERS	2.	2.	2.	2.	3.
AIDES	2.	0.	0.	0.	2.
EMOTIONALLY HANDICAPPED					
TEACHERS	1.	3.	6.	13.	16.
AIDES	0.	0.	0.	0.	16.
ORTHOPEDIC & HEALTH IMPAIRED					
TEACHERS	2.	1.	3.	5.	6.
AIDES	1.	0.	0.	0.	5.
LEARNING DISABLED					
TEACHERS	21.	24.	28.	32.	35.
AIDES	11.	0.	0.	0.	34.
SEVERELY HANDICAPPED					
TEACHERS	0.	1.	1.	2.	2.
AIDES	0.	0.	0.	0.	2.
TOTAL PROGRAM PERSONNEL					
TEACHERS	55.	65.	83.	99.	118.
AIDES	26.	0.	0.	0.	95.
RELATED SERVICES [illegible]					
MILD MENTALLY HANDICAPPED					
PROFESSIONALS	1.	1.	2.	3.	3.

AIDES	0.	0.	0.	0.	0.
MODERATE MENTALLY HANDICAPPED					
PROFESSIONALS	0.	0.	0.	0.	0.
AIDES	0.	0.	0.	0.	0.
HEARING IMPAIRED					
PROFESSIONALS	0.	0.	0.	0.	0.
AIDES	0.	0.	0.	0.	0.
SPEECH IMPAIRED					
PROFESSIONALS	0.	0.	0.	0.	0.
AIDES	0.	0.	0.	0.	0.
VISUALLY HANDICAPPED					
PROFESSIONALS	0.	0.	0.	0.	0.
AIDES	0.	0.	0.	0.	0.
EMOTIONALLY HANDICAPPED					
PROFESSIONALS	0.	0.	0.	0.	0.
AIDES	0.	0.	0.	0.	0.
ORTHOPEDIC & HEALTH IMPAIRED					
PROFESSIONALS	1.	1.	1.	2.	2.
AIDES	0.	0.	0.	0.	2.
LEARNING DISABLED					
PROFESSIONALS	0.	0.	0.	0.	0.
AIDES	0.	0.	0.	0.	0.
SEVERELY HANDICAPPED					
PROFESSIONALS	0.	0.	0.	0.	0.
AIDES	0.	0.	0.	0.	0.
TOTAL SERVICE PERSONNEL					
PROFESSIONALS	2.	2.	3.	4.	5.
AIDES	0.	0.	0.	0.	2.
TOTAL PERSONNEL					
TEACHERS & PROFSNLS	54.	68.	83.	102.	123.
AIDES	26.	0.	0.	0.	97.

Report 8

Number of Personnel by Program and Service

The difference between this report and the preceding one (Report 7) is that the numbers of personnel required are shown according to the instructional program or related service, without regard to the category of students served. The totals, however, are the same on both reports.

The numbers in the first year column come from the input data on Worksheets 3A and 3B (under the last column on the worksheets, CURRENT NUMBER) and should be checked for accuracy.

Succeeding years' numbers of teachers are derived from calculations based on the number of students assigned to each program and the student/teacher ratio for that program. The number of professionals required to provide related services is calculated in the same way. The number of aides needed is based on the aide/teacher or aide/professional ratio applied to the number of teacher units or professional units previously calculated.

It may be that not all programs and services will show personnel. For instance, in the example, no personnel are shown for Other Agency Day School or Residential School, as there were no district personnel staffing these programs.

This report's utility lies in being able to provide information such as: How many resource room teachers will be required? How many speech and language teachers will be needed to serve the projected number of students? Looking at personnel requirements in terms of programs and services, rather than by category, is generally most useful for planning purposes.

REPORT 8
NUMBER OF PERSONNEL BY PROGRAM AND SERVICE

	1982-83	1983-84	1984-85	1985-86	1986-87
INSTRUCTIONAL PROGRAMS					
ITINERANT INSTRUCTION					
TEACHERS	0.	1.	1.	2.	3.
AIDES	0.	0.	0.	0.	0.
SPEECH & LANGUAGE					
TEACHERS	7.	9.	12.	15.	19.
AIDES	0.	0.	0.	0.	0.
RESOURCE ROOM					
TEACHERS	10.	15.	22.	29.	36.
AIDES	4.	8.	15.	25.	36.
SPECIAL CLASS MODERATE					
TEACHERS	3[illegible].	36.	39.	42.	48.
AIDES	19.	24.	30.	38.	48.
SPECIAL CLASS SEVERE					
TEACHERS	3.	4.	5.	8.	11.
AIDES	3.	4.	5.	8.	11.
HOME & HOSPITAL					
TEACHERS	1.	1.	1.	1.	1.
AIDES	0.	0.	0.	0.	0.
OTHER AGENCY DAY SCHOOL					
TEACHERS	0.	0.	0.	0.	0.
AIDES	0.	0.	0.	0.	0.
RESIDENTIAL SCHOOL					
TEACHERS	0.	0.	0.	0.	0.
AIDES	0.	0.	0.	0.	0.
TOTAL PROGRAM PERSONNEL					
TEACHERS	55.	65.	83.	98.	118.
AIDES	26.	37.	51.	71.	95.
RELATED SERVICES					
PHYSICAL THERAPY					
PROFESSIONALS	1.	1.	1.	2.	2.
AIDES	0.	0.	0.	0.	2.

VOCATIONAL COUNSELING					
PROFESSIONALS	1.	2.	2.	3.	4.
AIDES	0.	0.	0.	0.	0.
TRANSPORTATION					
PROFESSIONALS	0.	0.	0.	0.	0.
AIDES	0.	0.	0.	0.	0.
SPECIAL TRANSPORTATION					
PROFESSIONALS	0.	0.	0.	0.	0.
AIDES	0.	0.	0.	0.	0.
PSYCHOTHERAPY					
PROFESSIONALS	0.	0.	0.	0.	0.
AIDES	0.	0.	0.	0.	0.
INTERPRETERS					
PROFESSIONALS	0.	0.	0.	0.	0.
AIDES	0.	0.	0.	0.	0.
TOTAL SERVICE PERSONNEL					
PROFESSIONALS	2.	2.	3.	4.	5.
AIDES	0.	0.	0.	0.	2.
TOTAL PERSONNEL					
TEACHERS	56.	68.	83.	102.	123.
AIDES	26.	37.	51.	71.	97.

Report 9
Costs by Category

There is a separate Report 9 for each category of special education students. The category name is shown at the top of the left column.

The report shows the cost of providing instructional programs and related services to the category for each year in the planning period. Separate totals for programs and services are shown in constant dollars. Totals for programs and services combined are given in both constant (beginning year) and inflated dollars.

This report is useful for answering questions such as: How much does it cost to serve the district's population of mild mentally handicapped students? How much will it cost next year? How much will it cost to provide speech services to the whole category?

The report may be compared to Report 4 for the category to understand the reasons for cost changes over time. For instance, if there are increasing numbers of students to be served in the category, there may be increasing costs. Likewise, if students are to be provided with additional services or programs, costs may show increases. On the other hand, if student placements are going to shift from more expensive to less expensive programs, the result may be a lowering of costs shown in Report 9.

REPORT 9
COSTS BY CATEGORY

	1982-83	1983-84	1984-85	1985-86	1986-87
MILD MENTALLY HANDICAPPED					
INSTRUCTIONAL PROGRAMS					
ITINERANT INSTRUCTION	0.	0.	2277.	2574.	2960.
SPEECH & LANGUAGE	7114.	9735.	16187.	22351.	26818.
RESOURCE ROOM	43411.	82577.	131833.	179773.	237300.
SPECIAL CLASS MODERATE	329072.	383853.	383475.	383080.	392000.
SPECIAL CLASS SEVERE	0.	0.	0.	0.	0.
HOME & HOSPITAL	0.	0.	0.	0.	0.
OTHER AGENCY DAY SCHOOL	123000.	102500.	82000.	41000.	0.
RESIDENTIAL SCHOOL	0.	0.	0.	0.	0.
INSTRUCTIONAL PROGRAMS TOTAL	502596.	578666.	615773.	628778.	659078.
RELATED SERVICES					
PHYSICAL THERAPY	0.	0.	0.	0.	0.
VOCATIONAL COUNSELING	14945.	23163.	33128.	44654.	54910.
TRANSPORTATION	51500.	50000.	50000.	50000.	50000.
SPECIAL TRANSPORTATION	0.	0.	0.	0.	0.
PSYCHOTHERAPY	0.	0.	0.	0.	0.
INTERPRETERS	0.	0.	0.	0.	0.
RELATED SERVICES TOTAL	66445.	73163.	83128.	94654.	104910.
CATEGORY TOTAL (CONSTANT $)	569041.	651829.	698901.	723432.	763988.
CATEGORY TOTAL (INFLATED $)	569041.	717312.	861046.	940396.	1128539.

Report 10

Costs by Programs and Services

This report shows costs for each of the instructional programs and related services for each year of the planning period. It also gives both a program and a service total, as well as a combined total cost. These totals are all shown in constant and inflated dollars.

This is one of the most interesting reports to district planners (and generally the one turned to first), as it is here that the overall costs of the district's special education program (with the exception of district support services) are shown: the report represents the dollar impact of your planning decisions.

The report is also useful to analyze from the standpoint of individual programs and services, allowing planners to see which will have increasing costs, which will have decreasing costs and, in general, where the money will be spent, for which programs and services.

REPORT 19
COSTS BY PROGRAMS AND SERVICES

	1982-83	1983-84	1984-85	1985-86	1986-87
INSTRUCTIONAL PROGRAMS					
ITINERANT INSTRUCTION	1480.	8992.	19126.	30887.	50320.
SPEECH & LANGUAGE	103250.	134133.	175282.	221277.	273545.
RESOURCE ROOM	187000.	331177.	467783.	662591.	819250.
SPECIAL CLASS MODERATE	664100.	809502.	872184.	946755.	1073333.
SPECIAL CLASS SEVERE	67650.	97416.	119837.	187338.	240250.
HOME & HOSPITAL	7000.	7360.	7770.	8235.	8750.
OTHER AGENCY DAY SCHOOL	475600.	463080.	455100.	393600.	369000.
RESIDENTIAL SCHOOL	182500.	161200.	140400.	114400.	104000.
TOTAL PROGRAM COST (CONSTANT $)	1688090.	2033650.	2277490.	2565084.	2946249.
TOTAL PROGRAM COST (INFLATED $)	1688090.	2237024.	2805568.	3476201.	4352104.
RELATED SERVICES					
PHYSICAL THERAPY	10750.	17200.	24571.	33077.	35833.
VOCATIONAL COUNSELING	16150.	24455.	35889.	47631.	58140.
TRANSPORTATION	73000.	79500.	92500.	108000.	137500.
SPECIAL TRANSPORTATION	8000.	16033.	20000.	28000.	28000.
PSYCHOTHERAPY	1500.	4002.	7500.	10000.	10000.
INTERPRETERS	0.	3960.	3000.	2500.	2500.
TOTAL SERVICES COST (CONSTANT $)	109400.	144150.	183460.	229208.	271973.
TOTAL SERVICES COST (INFLATED $)	109400.	158565.	226323.	319623.	401750.
TOTAL COST (CONSTANT $)	1797490.	2177800.	2460951.	2794292.	3218222.
TOTAL COST (INFLATED $)	1797490.	2395589.	3031891.	3795824.	4753855.

Report 11
Costs per Student by Category
Instructional Programs

In this report, instructional program costs are shown on an average cost per student basis for each category for each year. Costs are shown in both constant and inflated dollars. The report also gives an average cost per student to provide instructional programs for all categories.

Costs per student are calculated using the total instructional costs for the category (from Report 9), divided by the number of students served in the category (from Report 2).

Cost per student is another way of looking at the district's special education program. While a cost per student figure by itself is not a particularly useful tool for planning, it can illustrate quickly and easily the cost differentials for various categories and how costs can change--increase for some categories, decrease for others--as a result of your planning decisions. In the example, for instance, the cost per student in constant dollars decreases for six categories (some categories having dramatic decrease). From this perspective the cost efficiency of your planning is visible: even though total costs may rise, as a result of increased numbers of students, or additional program and service offerings or lowering personnel ratios, costs per student may remain the same or actually decrease if more students are appropriately placed in less expensive programs.

REPORT 17
COSTS PER STUDENT BY CATEGORY
INSTRUCTIONAL PROGRAMS

	1982-83	1983-84	1984-85	1985-86	1986-87
MILD MENTALLY HANDICAPPED					
CONSTANT $	1590.	1703.	1629.	1572.	1551.
INFLATED $	1590.	1873.	1996.	2130.	2291.
MODERATE MENTALLY HANDICAPPED					
CONSTANT $	3574.	3251.	2739.	2503.	2135.
INFLATED $	3574.	3576.	3355.	3393.	3154.
HEARING IMPAIRED					
CONSTANT $	3242.	2662.	2174.	1838.	1855.
INFLATED $	3242.	2928.	2670.	2491.	2739.
SPEECH IMPAIRED					
CONSTANT $	235.	253.	272.	293.	313.
INFLATED $	235.	278.	333.	397.	463.
VISUALLY HANDICAPPED					
CONSTANT $	3035.	3090.	3152.	3030.	3307.
INFLATED $	3035.	3399.	3861.	4106.	4885.
EMOTIONALLY HANDICAPPED					
CONSTANT $	2760.	1980.	1897.	1913.	2152.
INFLATED $	2760.	2178.	2323.	2592.	3179.
ORTHOPEDIC & HEALTH IMPAIRED					
CONSTANT $	2784.	2922.	2689.	2773.	2732.
INFLATED $	2784.	3214.	3293.	3753.	4036.
LEARNING DISABLED					
CONSTANT $	1319.	1454.	1436.	1462.	1434.
INFLATED $	1319.	1599.	1759.	1980.	2118.
SEVERELY HANDICAPPED					
CONSTANT $	4540.	4229.	4340.	4345.	4484.
INFLATED $	4540.	4652.	5317.	5889.	6624.
ALL CATEGORIES AVERAGE COST PER STUDENT					
CONSTANT $	1264.	1325.	1283.	1277.	1315.
INFLATED $	1264.	1457.	1571.	1730.	1943.

Report 12

Costs per Student by Category

Related Services

This report shows average related services costs per student by category for each year. Costs are shown in both constant and inflated dollars. The report also gives an average cost per student to provide related services.

Costs per student are calculated using the total related services costs for the category (Report 9), divided by the number of students in the category receiving related services (Report 4).

It may be that some categories of students will receive no related services. In the example, for instance, neither speech impaired nor learning disabled students have a cost shown for related services. Severely handicapped students have no cost for related services for the first year, as they were not placed in district programs.

Costs per student by category for related services, like those for instructional programs, illustrate cost differentials between categories, and they can show the cost efficiencies inherent in the planning strategy.

REPORT 12
COSTS PER STUDENT BY CATEGORY
RELATED SERVICES

	1982-83	1983-84	1984-85	1985-86	1986-87
MILD MENTALLY HANDICAPPED					
CONSTANT $	210.	215.	219.	237.	247.
INFLATED $	210.	237.	270.	321.	365.
MODERATE MENTALLY HANDICAPPED					
CONSTANT $	176.	250.	356.	410.	500.
INFLATED $	176.	275.	438.	556.	739.
HEARING IMPAIRED					
CONSTANT $	167.	200.	164.	115.	107.
INFLATED $	167.	220.	202.	156.	158.
SPEECH IMPAIRED					
CONSTANT $	0.	0.	0.	0.	0.
INFLATED $	0.	0.	0.	0.	0.
VISUALLY HANDICAPPED					
CONSTANT $	316.	300.	250.	208.	200.
INFLATED $	316.	330.	308.	282.	295.
EMOTIONALLY HANDICAPPED					
CONSTANT $	172.	164.	188.	208.	250.
INFLATED $	172.	181.	231.	282.	369.
ORTHOPEDIC & HEALTH IMPAIRED					
CONSTANT $	443.	554.	667.	747.	656.
INFLATED $	443.	610.	821.	1013.	969.
LEARNING DISABLED					
CONSTANT $	0.	0.	0.	2.	0.
INFLATED $	0.	0.	0.	3.	0.
SEVERELY HANDICAPPED					
CONSTANT $	0.	267.	222.	320.	320.
INFLATED $	0.	293.	274.	434.	473.
ALL CATEGORIES AVERAGE COST PER STUDENT					
CONSTANT $	82.	94.	103.	114.	121.
INFLATED $	82.	103.	127.	155.	179.

Report 13

Total Costs per Student by Category

This report combines the two previous reports (Report 11 and 12), showing the average costs per student of providing both instructional programs and related services. An average cost for all special education students is also given. Costs are shown in constant and inflated dollars.

In the example, there are several categories which show decreasing costs per student, as well as some which increase only slightly in constant dollars. This is the effect of serving these students in less expensive programs.

A check with Report 2 for numbers of students, and with Report 4 for a particular category answers questions relative to why the cost per student pattern appears as it does. More students may be served and more services may be provided, but this may be offset by serving more students in less costly placements.

REPORT 13
TOTAL COSTS PER STUDENT BY CATEGORY

	1982-83	1983-84	1984-85	1985-86	1986-87
INSTRUCTIONAL PROGRAMS AND RELATED SERVICES					
MILD MENTALLY HANDICAPPED					
CONSTANT $	1801.	1917.	1839.	1809.	1798.
INFLATED $	1801.	2109.	2266.	2451.	2655.
MODERATE MENTALLY HANDICAPPED					
CONSTANT $	3750.	3501.	3095.	2913.	2635.
INFLATED $	3750.	3851.	3813.	3948.	3892.
HEARING IMPAIRED					
CONSTANT $	3408.	2862.	2337.	1953.	1962.
INFLATED $	3408.	3148.	2880.	2647.	2898.
SPEECH IMPAIRED					
CONSTANT $	235.	253.	272.	293.	313.
INFLATED $	235.	278.	335.	397.	463.
VISUALLY HANDICAPPED					
CONSTANT $	3351.	3390.	3402.	3238.	3507.
INFLATED $	3351.	3729.	4191.	4388.	5180.
EMOTIONALLY HANDICAPPED					
CONSTANT $	2932.	2144.	2084.	2121.	2402.
INFLATED $	2932.	2359.	2568.	2875.	3548.
ORTHOPEDIC & HEALTH IMPAIRED					
CONSTANT $	3228.	3476.	3356.	3517.	3389.
INFLATED $	3228.	3824.	4134.	4766.	5006.
LEARNING DISABLED					
CONSTANT $	1319.	1454.	1428.	1402.	1434.
INFLATED $	1319.	1599.	1759.	1900.	2118.
SEVERELY HANDICAPPED					
CONSTANT $	4540.	4496.	4563.	4665.	4804.
INFLATED $	4540.	4946.	5621.	6322.	7096.
AVERAGE COST (CONSTANT $)	1346.	1419.	1386.	1391.	1437.
AVERAGE COST (INFLATED $)	1346.	1561.	1708.	1885.	2122.

Report 14

Costs per Student by Program and Service

In this report, the average cost per special education student is broken down according to instructional program and related service; that is, how much it costs to serve one student in each of the placements, regardless of category. There is an average cost per student for all instructional programs (the same as shown in Report 11), an average cost per student for all related services (the same as shown in Report 12) and an average cost per student to provide both programs and services (the same as shown in Report 13). All costs are given in constant and inflated dollars.

What this report demonstrates is the differences in per student costs for the various programs. Certain programs are relatively low cost, others are relatively high. The factors which determine this are found on Report 5, which gives the unit cost per program, and Report 6, which shows the student/personnel ratios for each program.

Related service costs per student may look quite different, however. In the example, a very low cost per student figure is shown for related services, for instance, $6.00 per student currently for special transportation. The low figure occurs because the calculations of cost per student are based on the total number of special education students (and the total related services costs), not just the number of students receiving related services. This way you have an idea what related service costs are as part of a total program. A check of Report 3 shows that only 24% of all special eduction students will have related service placements by the final year.

REPORT 14
COSTS PER STUDENT BY PROGRAM AND SERVICE

PROGRAM OR SERVICE.	1982-83	1983-84	1984-85	1985-86	1986-87
INSTRUCTIONAL PROGRAMS					
ITINERANT INSTRUCTION					
CONSTANT $	373.	408.	455.	515.	592.
INFLATED $	373.	449.	561.	698.	874.
SPEECH & LANGUAGE					
CONSTANT $	203.	216.	231.	248.	268.
INFLATED $	203.	238.	285.	337.	396.
RESOURCE ROOM					
CONSTANT $	658.	869.	942.	1027.	1130.
INFLATED $	658.	954.	1160.	1392.	1669.
SPECIAL CLASS MODERATE					
CONSTANT $	1489.	1745.	1784.	1824.	1867.
INFLATED $	1489.	1919.	2197.	2472.	2757.
SPECIAL CLASS SEVERE					
CONSTANT $	3303.	3608.	3866.	4163.	4510.
INFLATED $	3303.	3969.	4763.	5642.	6662.
HOME & HOSPITAL					
CONSTANT $	1400.	1474.	1556.	1647.	1750.
INFLATED $	1400.	1621.	1916.	2232.	2585.
OTHER AGENCY DAY SCHOOL					
CONSTANT $	4100.	4100.	4100.	4100.	4100.
INFLATED $	4100.	4510.	5051.	5556.	6056.
RESIDENTIAL SCHOOL					
CONSTANT $	5200.	5200.	5200.	5200.	5200.
INFLATED $	5200.	5720.	6406.	7047.	7681.
AVERAGE FOR INSTRUCTIONAL PROGRAMS					
CONSTANT $	1264.	1325.	1283.	1277.	1315.
INFLATED $	1264.	1457.	1591.	1730.	1943.
RELATED SERVICES					
PHYSICAL THERAPY					
CONSTANT $	8.	11.	14.	16.	16.
INFLATED $	8.	12.	17.	22.	24.
VOCATIONAL COUNSELING					
CONSTANT $	12.	14.	20.	24.	26.

```
INFLATED $                           12.       18.       25.       32.       38.

TRANSPORTATION
CONSTANT $                           55.       52.       52.       54.       61.
INFLATED $                           55.       57.       64.       73.       91.

SPECIAL TRANSPORTATION
CONSTANT $                            6.       10.       11.       14.       13.
INFLATED $                            6.       11.       14.       19.       18.

PSYCHOTHERAPY
CONSTANT $                            1.        3.        4.        5.        4.
INFLATED $                            1.        3.        5.        7.        7.

INTERPRETERS
CONSTANT $                            0.        2.        2.        1.        1.
INFLATED $                            0.        2.        2.        2.        2.

AVERAGE FOR RELATED SERVICES
CONSTANT $                           82.       94.      103.      114.      121.
INFLATED $                           82.      103.      127.      155.      179.


AVERAGE FOR ALL STUDENTS
CONSTANT $                         1346.     1419.     1386.     1391.     1437.
INFLATED $                         1346.     1561.     1708.     1885.     2122.
```

Report 15

Summary by Category

This report presents the key summary information for each category for each year in the planning period. It gives the unduplicated count of students in the category, the total cost of providing both instructional programs and related services to the category in constant (beginning year) dollars, and the cost per student in constant dollars.

The costs are given in constant dollars to allow the cost effects of student and program changes to be shown separately, without inflationary influences.

Also shown are the total number of special education students to be served each year, the total cost in both constant and inflated dollars, and the average cost per special education student in both constant and inflated dollars.

This summary is a useful tool for showing the highlights of your special education planning, as it pulls together in one place the important data on each of the categories.

REPORT 15
SUMMARY BY CATEGORY

	1982-83	1983-84	1984-85	1985-86	1986-87
MILD MENTALLY HANDICAPPED					
STUDENTS (UNDUPLICATED)	316.	340.	380.	400.	425.
COST (CONSTANT $)	569041.	651829.	698821.	723432.	763980.
COST PER STUDENT (CONSTANT $)	1801.	1917.	1839.	1809.	1798.
MODERATE MENTALLY HANDICAPPED					
STUDENTS (UNDUPLICATED)	34.	40.	45.	50.	55.
COST (CONSTANT $)	127507.	140023.	139275.	145674.	144917.
COST PER STUDENT (CONSTANT $)	3750.	3501.	3095.	2913.	2635.
HEARING IMPAIRED					
STUDENTS (UNDUPLICATED)	36.	45.	55.	65.	70.
COST (CONSTANT $)	122695.	128790.	128559.	126961.	137316.
COST PER STUDENT (CONSTANT $)	3408.	2862.	2337.	1953.	1962.
SPEECH IMPAIRED					
STUDENTS (UNDUPLICATED)	440.	500.	570.	640.	710.
COST (CONSTANT $)	103573.	126513.	155094.	187307.	222379.
COST PER STUDENT (CONSTANT $)	235.	253.	272.	293.	313.
VISUALLY HANDICAPPED					
STUDENTS (UNDUPLICATED)	19.	20.	22.	24.	25.
COST (CONSTANT $)	63670.	67807.	74836.	77715.	87670.
COST PER STUDENT (CONSTANT $)	3351.	3390.	3402.	3238.	3507.
EMOTIONALLY HANDICAPPED					
STUDENTS (UNDUPLICATED)	29.	70.	120.	180.	240.
COST (CONSTANT $)	85030.	150095.	250127.	381810.	576533.
COST PER STUDENT (CONSTANT $)	2932.	2144.	2084.	2121.	2402.
ORTHOPEDIC & HEALTH IMPAIRED					
STUDENTS (UNDUPLICATED)	45.	55.	65.	75.	90.
COST (CONSTANT $)	145249.	191204.	218121.	263779.	304988.
COST PER STUDENT (CONSTANT $)	3228.	3476.	3356.	3517.	3389.
LEARNING DISABLED					
STUDENTS (UNDUPLICATED)	400.	450.	500.	550.	600.
COST (CONSTANT $)	527515.	654399.	713909.	773983.	860332.
COST PER STUDENT (CONSTANT $)	1319.	1454.	1428.	1407.	1434.
SEVERELY HANDICAPPED					
STUDENTS (UNDUPLICATED)	10.	15.	18.	25.	25.
COST (CONSTANT $)	45400.	67440.	82129.	116631.	120100.
COST PER STUDENT (CONSTANT $)	4540.	4496.	4563.	4665.	4804.
TOTALS					
STUDENTS (UNDUPLICATED)	1375.	1535.	1775.	2009.	2240.

```
TOTAL COST (CONSTANT $)              1797483.  2177808.  2466951.  2794292.  3218222.
COST PER STUDENT (CONSTANT $)           1346.     1419.     1386.     1391.     1437.

TOTAL COST (INFLATED $)              1797483.  2395599.  3031891.  3786824.  4753055.
COST PER STUDENT (INFLATED $)           1346.     1561.     1708.     1885.     2122.
```

Report 16

Summary by Program and Service

This report presents summary information by instructional program and related service for each year in the planning period. Data are grouped under each program and service name. The report shows numbers of students who will be served (duplicated count), the number of teachers and professionals required, the number of aides needed, the costs of providing the program or service in constant dollars, and the cost per student of providing the program or service. There are totals for instructional programs and for related services, and overall totals for both programs and services combined.

The value of this report lies in its ability to provide, in one place, an overview of the district's special education program currently and for the future years in the planning period: There is a listing of all programs and services provided, the students who are served in them, personnel needed to staff them and all costs. Looking at this report reveals which programs are anticipated to grow, which are projected to decrease, what kind of personnel may be needed and the relative expenses associated with the different programs and services.

REPORT 16
SUMMARY BY PROGRAM AND SERVICE

	1982-83	1983-84	1984-85	1985-86	1986-87
INSTRUCTIONAL PROGRAMS					
ITINERANT INSTRUCTION					
STUDENTS (DUPLICATED)	4.	22.	42.	60.	85.
TEACHERS	0.	1.	1.	2.	3.
AIDES	0.	0.	0.	0.	0.
COST (CONSTANT $)	1480.	8982.	19126.	30887.	50320.
COST PER STUDENT (CONSTANT $)	370.	408.	455.	515.	592.
SPEECH & LANGUAGE					
STUDENTS (DUPLICATED)	508.	621.	750.	891.	1020.
TEACHERS	7.	9.	12.	15.	19.
AIDES	0.	0.	0.	0.	0.
COST (CONSTANT $)	103250.	134133.	175202.	221277.	273545.
COST PER STUDENT (CONSTANT $)	203.	216.	234.	248.	268.
RESOURCE ROOM					
STUDENTS (DUPLICATED)	288.	381.	518.	645.	725.
TEACHERS	10.	15.	22.	29.	36.
AIDES	4.	0.	15.	25.	36.
COST (CONSTANT $)	187600.	331177.	487703.	662591.	819250.
COST PER STUDENT (CONSTANT $)	648.	869.	942.	1027.	1130.
SPECIAL CLASS, MODERATE					
STUDENTS (DUPLICATED)	446.	464.	489.	519.	575.
TEACHERS	34.	36.	39.	42.	48.
AIDES	19.	24.	33.	38.	40.
COST (CONSTANT $)	664100.	809582.	872184.	946755.	1073333.
COST PER STUDENT (CONSTANT $)	1489.	1745.	1784.	1824.	1867.
SPECIAL CLASS SEVERE					
STUDENTS (DUPLICATED)	20.	27.	31.	45.	55.
TEACHERS	3.	4.	5.	8.	11.
AIDES	3.	4.	5.	8.	11.
COST (CONSTANT $)	67657.	97416.	119037.	187338.	248050.
COST PER STUDENT (CONSTANT $)	3383.	3608.	3966.	4163.	4510.
HOME & HOSPITAL					
STUDENTS (DUPLICATED)	5.	5.	5.	5.	5.
TEACHERS	1.	1.	1.	1.	1.
AIDES	0.	0.	0.	0.	0.
COST (CONSTANT $)	7000.	7368.	7778.	8235.	8750.
COST PER STUDENT (CONSTANT $)	1400.	1474.	1556.	1647.	1750.
OTHER AGENCY DAY SCHOOL					
STUDENTS (DUPLICATED)	116.	116.	111.	96.	90.
TEACHERS	[illegible]	[illegible]	3.	0.	0.
AIDES	0.	[illegible]	0.	0.	[illegible]
COST (CONSTANT $)	475600.	[illegible]	455100.	393626.	369093.

```
COST PER STUDENT (CONSTANT $)             4100.     4100.     4100.     4100.     4100.

RESIDENTIAL SCHOOL
STUDENTS (DUPLICATED)                       35.       31.       27.       22.       20.
TEACHERS                                     0.        0.        0.        0.        0.
AIDES                                        0.        0.        0.        0.        0.
COST (CONSTANT $)                       182000.   161200.   140400.   114400.   104000.
COST PER STUDENT (CONSTANT $)             5200.     5200.     5200.     5200.     5200.

TOTAL FOR INSTRUCTIONAL PROGRAMS
STUDENTS (DUPLICATED)                     1414.     1660.     1901.     2203.     2575.
TEACHERS                                    55.       65.       80.       98.      110.
AIDES                                       26.       37.       51.       71.       95.
COST (CONSTANT $)                      1689000.  2033658.  2277490.  2565084.  2946249.
COST PER STUDENT (CONSTANT $)             1264.     1325.     1203.     1277.     1315.
COST (INFLATED $)                      1688700.  2227024.  2905850.  3476201.  4352104.
COST PER STUDENT (INFLATED $)             1264.     1457.     1591.     1730.     1943.


RELATED SERVICES

PHYSICAL THERAPY
STUDENTS                                    10.       15.       20.       25.       25.
PROFESSIONALS                                1.        1.        1.        2.        2.
AIDES                                        0.        0.        0.        0.        2.
COST (CONSTANT $)                        10750.    17200.    24571.    33077.    35833.
COST PER STUDENT (CONSTANT $)             1075.     1147.     1229.     1323.     1433.

VOCATIONAL COUNSELING
STUDENTS                                    67.       95.      130.      160.      180.
PROFESSIONALS                                1.        2.        2.        3.        4.
AIDES                                        0.        3.        0.        0.        0.
COST (CONSTANT $)                        16150.    24450.    35889.    47631.    58140.
COST PER STUDENT (CONSTANT $)              241.      257.      276.      298.      323.

TRANSPORTATION
STUDENTS                                   146.      159.      185.      216.      275.
PROFESSIONALS                                0.        0.        0.        0.        0.
AIDES                                        0.        0.        0.        0.        0.
COST (CONSTANT $)                        73000.    79500.    92500.   108000.   137500.
COST PER STUDENT (CONSTANT $)              500.      500.      500.      500.      500.

SPECIAL TRANSPORTATION
STUDENTS                                    10.       20.       25.       35.       35.
PROFESSIONALS                                0.        0.        0.        0.        0.
AIDES                                        0.        0.        0.        0.        0.
COST (CONSTANT $)                         8000.    16000.    20000.    28000.    28000.
COST PER STUDENT (CONSTANT $)              800.      800.      800.      800.      800.

PSYCHOTHERAPY
STUDENTS                                     3.        8.       15.       20.       20.
PROFESSIONALS                                0.        0.        0.        0.        0.
AIDES                                        0.        0.        0.        0.        0.
COST (CONSTANT $)                         1500.     4000.     7500.    10000.    10000.
COST PER STUDENT (CONSTANT $)              500.      500.      500.      500.      500.

INTERPRETERS
STUDENTS                                     0.       12.       12.       10.       10.
PROFESSIONALS                                0.        3.        3.        4.        4.
```

```
AIDES                                          0.         3.         0.         0.         0.
COST (CONSTANT $)                              0.      3000.      3000.      2500.      2500.
COST PER STUDENT (CONSTANT $)                  0.       250.       250.       250.       250.

TOTAL FOR RELATED SERVICES
STUDENTS                                     236.       309.       387.       466.       545.
PROFESSIONALS                                  2.         2.         3.         4.         5.
AIDES                                          0.         0.         0.         0.         2.
COST (CONSTANT $)                         109400.    144157.    183460.    229200.    271973.
COST PER STUDENT (CONSTANT $)                464.       467.       474.       492.       499.
COST (INFLATED $)                         109400.    158565.    226023.    310623.    401750.
COST PER STUDENT (INFLATED $)                464.       513.       584.       667.       737.

OVERALL TOTALS
TOTAL TEACHERS & PROFESSIONALS                56.        58.        83.       102.       123.
TOTAL AIDES                                   26.        37.        51.        71.        97.
TOTAL COST (CONSTANT $)                  1797400.   2177800.   2460951.   2794292.   3218222.
TOTAL COST (INFLATED $)                  1797400.   2395587.   3031691.   3786824.   4753855.
COST PER STUDENT (CONSTANT $)               1346.      1419.      1386.      1391.      1437.
COST PER STUDENT (INFLATED $)               1346.      1561.      1708.      1885.      2122.
```

Report 17

District Support Services Description

This report shows input data on district support services. It should be checked for accuracy against Worksheet 6. The report lists the resources for one unit of each support service, the number of district staff (FTE) in one unit of service, the price of each resource and the annual service levels for each year in the planning period. A total cost per one unit of support service is also given.

The report, like others which show input data, can be used for background to understand the basis on which calculations of future costs and numbers of personnel are made by the computer.

REPORT 17

DISTRICT SUPPORT SERVICES DESCRIPTION

SUPPORT SERVICES RESOURCES	STAFF	PRICE	SERVICE LEVELS 1982-83	1983-84	1984-85	1985-86	1986-87
DISTRICT ADMINISTRATION							
SE SUPERVISOR		25000.					
CLERICAL		10000.					
TRAVEL		3000.					
M & O		1000.					
TOTAL	1.0	39000.	1.00	1.00	1.00	1.00	1.00
SPECIAL ED CONSULTANTS							
CONSULTANT		16000.					
CLERICAL		5000.					
TRAVEL		2000.					
M & O		1000.					
TOTAL	1.0	24000.	2.00	3.00	4.00	5.00	6.00
PARENT COORDINATORS							
COORDINATOR		15000.					
CLERICAL		5000.					
TRAVEL		2000.					
M & O		1000.					
TOTAL	1.0	23000.	0.00	1.00	1.00	2.00	2.00
INSERVICE TRAINING							
TOTAL ANNUAL COST		50000.					
TOTAL	0.0	50000.	1.00	1.50	1.50	1.00	2.00

```
DIAGNOSTIC TEAM
     PSYCHOLOGIST                      20000.
     SOCIAL WORKER                     15000.
     P/P TEACHER                       18000.
     S & L THERAPIST                   18000.
     MATERIALS                          5000.
     TRAVEL                             4000.
     CLERICAL                          10000.
     M & O                              2000.
     PURCHASED SERVICES                10000.
     TOTAL                   4.0      102000.          1.00     1.50     2.00     2.50     3.00

DUE PROCESS HEARINGS
     AVERAGE COST PER HEARING           1200.
     TOTAL                   0.0        1200.         12.00    15.00    10.00     8.00     8.00
```

Report 18

District Support Services

This final report gives the projections for district support services. The report shows the number of personnel needed and the costs (in constant dollars) of providing each of the support services for each year of the planning period.

Totals for all support services are given. Total costs are shown in both constant and inflated dollars.

District support services costs can be added to the total instructional program and related services costs shown on previous reports (Report 10, 15 or 16) to arrive at a grand total special education cost for the district.

```
                                                                          LEA
                                                                          K - 12
                                                                          PLAN 1
                                                                          PAGE 34

                                   REPORT 18
                           DISTRICT SUPPORT SERVICES

SUPPORT SERVICES

                                 1982-83   1983-84   1984-85   1985-86   1986-87

DISTRICT ADMINISTRATION
        PERSONNEL                     1.        1.        1.        1.        1.
        COSTS (CONSTANT $)        39000.    39000.    39000.    39000.    39000.

SPECIAL ED CONSULTANTS
        PERSONNEL                     2.        3.        4.        5.        6.
        COSTS (CONSTANT $)        52000.    78000.   104000.   130000.   156000.

PARENT COORDINATORS
        PERSONNEL                     0.        1.        1.        2.        2.
        COSTS (CONSTANT $)            0.    23000.    23000.    46000.    46000.

INSERVICE TRAINING
        PERSONNEL                     0.        0.        0.        0.        0.
        COSTS (CONSTANT $)        50000.    75000.    75000.    90000.   100000.

DIAGNOSTIC TEAM
        PERSONNEL                     4.        6.        8.       10.       12.
        COSTS (CONSTANT $)       102000.   153000.   204000.   255000.   306000.

DUE PROCESS HEARINGS
        PERSONNEL                     0.        0.        0.        0.        0.
        COSTS (CONSTANT $)        14400.    12000.    12000.     9600.     9600.

TOTALS
    PERSONNEL                             7.        11.       14.       18.       21.
    TOTAL COST(CONSTANT $)      257400.   380000.   457000.   569600.   656600.
    TOTAL COST(INFLATED $)      257400.   418000.   563024.   771922.   969909.
```

V. MAKING ALTERNATIVE PROJECTIONS

The first set of reports obtained with the Local Special Education Planning Model represents a beginning of the planning process, your initial best guess at projecting your district's future special education program. What the reports illustrate is the impact of the planning decisions made when you filled out the worksheets. However, any one or all of those decisions can be changed. You are not limited to a single set of projections: the model is intended to be used as many times as you wish, so that you can produce a variety of possible special education plans for your district.

There are several reasons for considering making additional projections. After reviewing your initial set of reports, you may already be aware of needed modifications. For instance, costs may have appeared dramatically higher than anticipated or personnel requirements seemed far beyond the district's hiring capability. In this case, you may want to do another plan, modifying some of the assumptions about salaries, placements, personnel ratios and other factors which have a bearing on costs.

You may also, at this point, have new data: the latest figures on current numbers of students served for the year; more reliable estimates of projected student populations for the coming years; better or more up-to-date information on costs, salaries, service charges and the like; a new inflation rate; a more accurate personnel count. Or, you may wish to begin again with a new current year when you have newer, reliable data.

Finally, you may want to test some new plans. For example, you may want to show substantially different placement patterns from your first plan and see what impact these have on costs and personnel. You may want to try an "ideal" situation, or a budget-conscious plan, or both of these. You may want to measure the impact of union proposals. You may want to plan for a different age group entirely. You may want to plan using a different category scheme for grouping special education students.

Making alternative projections consists of completing a new set of worksheets, entering the data into the computer and obtaining the reports. You can use all new or modified data, or change one item only. Be sure that each new set of worksheets has its own run designation to differentiate it from others. Some of the possible changes in the various data elements are discussed below.

Age Group

It may be useful to plan for a smaller age group, such as elementary or secondary school only; or a special group, such as preschool or postschool. You may also want to try a different categorical approach to planning for these latter groups.

Years in Planning Period

Start with a new current year if new data are available. Shorten the planning period if your initial plan seemed to project too far in the future or if it appears possible to implement desired outcomes sooner; or lengthen the plan to five years, if you had not previously done so.

Total Student Population

If your distict can supply new estimates of expected future enrollments, you might want to prepare new plans based on these. Or make your own changes: modify your initial plan's estimates to see what would happen if total student population remained static, or increased, or decreased.

Inflation Rate

Changes in the inflation rate will have a direct impact on costs which are shown in the report in inflated dollars. You may want to try different anticipated inflation rates to see their effect.

Special Education Categories

You can use a different category scheme altogether, lump some categories of students together, or make finer distinctions between categories. You can reduce all categories to one ("special education students," for example), or add new categories to your initial plan's list. Any changes in categories are then followed through by organizing your data on numbers served and placements to correspond to this changed category scheme.

Current Number Served

Use more up-to-date information as available. Organize data to match changes in student categorization.

Instructional Programs and Related Services

Add new programs and services you would like to see implemented during the planning period. Enlarge and expand resources for certain programs and services. Use more up-to-date information on prices of resources. Or, if you are looking for ways to reduce costs, eliminate, reduce or modify resources as feasible and lower dollar estimates for some programs and services. Use more up-to-date information for numbers of teachers, professionals and aides.

Student Placements

Update current year information with more accurate data. For future years show more, or less, total students anticipated in the category (corresponding to any revisions in total student population estimates). Category by category, or for selected categories only, change your initial plan's placements. Show more students in less expensive programs, for example, or eliminate or reduce additional placements. Place students in new programs you are planning to implement. Phase out placements in some programs. Mainstream more, or fewer, students. Reduce the numbers of students receiving related services, or increase the numbers. Place students in new services. Discontinue some services.

Personnel Ratios

Raise desired student/personnel ratios in some or all programs and services to lower costs; raise desired aide/personnel ratios to maintain the larger class sizes or caseloads. Lower desired student/personnel ratios to handle more severe handicaps. Add aides to programs and services, or reduce or eliminate them.

District Support Services

Add new support services you would like to implement during the planning period. Change the service unit and corresponding type of resources for some services to allow more precise specification. Expand resources, or reduce or eliminate resources as feasible for some services. (Add or reduce the number of staff per unit to correspond to resource changes.) Use more up-to-date information on prices; or reduce estimated prices. Change service levels from your initial plan, showing decreases or phasing out of some services, or more gradual increases.

REFERENCES

Barro, S. "Modeling Resource Utilization in a School District." In Program Budgeting for School District Planning. S. Haggart, ed. Englewood Cliffs, NJ: Educational Technology Publications, 1972.

Bernstein, C., W. Hartman, M. Kirst, and R. Marshall. Financing Educational Services for the Handicapped: An Analysis of Current Research and Practices. Reston, VA: Council for Exceptional Children, 1976.

Chambers, J. and W. Hartman. "A Cost-Based Approach to the Funding of Educational Programs: An Application to Special Education." Stanford, CA: Institute for Research on Educational Finance and Governance, School of Education, Stanford University, 1980.

Curtis, W. Educational Resources Management System. Chicago: Research Corporation of the Association of School Business Officials, 1971.

Hartman, P., W. Hartman, C. Bernstein, and C. Lavine. Special Education Planning Model: User Guide. Palo Alto, CA: MAC, Inc., 1978.

Hartman, W. "Estimating the Costs of Educating Handicapped Children: A Resource-Cost Model Approach—Summary Report." Educational Evaluation and Policy Analysis. 3 (July - August 1981): 33-47.

Rossmiller, R., J. Hale, and L. Frohreich. Educational Programs for Exceptional Children: Resource Configurations and Costs. National Education Finance Project, Special Study No. 2. Madison, WI: Department of Educational Administration, University of Wisconsin, 1970.

LOCAL SPECIAL EDUCATION PLANNING MODEL:
COMPUTER PROGRAM LISTING

```
C     HARTMAN PROJECT
C     MODEL TO AID IN PLANNING SPECIAL EDUCATION SERVICES
C     COMPUTER IMPLIMENTATION BY:
C     WOODRUFF AND MURPHY, DECISION SYSTEMS ASSOCIATES
C     VERSION 1
C
C     FUNDAMENTAL DATA-STRUCTURES
C     THE FOLLOWING ARRAYS ARE USED THROUGHOUT THE PROGRAM
C     TOTROL (YEAR) -- ENROLLMENT TOTALS
C     TOTSPC(YEAR) -- ENROLLMENT TOTALS FOR SPEC. ED.
C     INFLTN (YEAR) -- INFLATION ESTIMATES
C     CATUDP (CAT,YEAR) -- UNDUPLICATED SPEC. ED. STUDENT COUNT
C     CATNAM (CAT, W) -- CATEGORY NAMES
C     SRVDUP (SRV, CAT, YEAR) -- DUPLICATED SERVICE LEVELS
C     SRVPRM (SRV, CAT, YEAR) -- UNDUPLICATED SERVICE LEVELS
C     SRVCST(SRV,CST,YEAR) -- SERVICE COSTS
C     SRVNAM (SRV,W) -- SERVICE NAMES
C     SRVCMP (SRV, POS) -- SERVICE COMPONENT POINTERS
C     SRVSTF (SRV,STF,YEAR) -- STAFF ALLOCATED
C     COMP (AOFF, INFO)  -- INFORMATION ABOUT COMPONENTS
C     CMPNAM (AOFF) -- COMPONENT NAMES
C     SRVRAT (SRV, STF, YEAR) -- STUDENT TEACHER RATIOS
C     DSTSUP (DST, YEAR) -- DISTRICT SUPPORT
C     DSTCST(DST,CST,YEAR) -- DISTRICT SERVICE COSTS
C     DSTCMP(DST, POS) -- DISTRICT SUPPORT COMPONENTS
C     DSTNAM(DST,W)
C     DSTPER(DST)  -- NUMBER OF PERSONAL FOR A DST
C     DSTSTF (DST,STF,YEAR)
C     RELSRV (REL, CAT, YEAR) -- RELATED SERVICE LEVELS
C     RELRAT (REL, STF, YEAR) -- REL. SERVICES STUDENT TEACHER RATIOS
C     RELCST(REL,CST,YEAR) -- RELATED SERVICE COSTS
C     RELNAM (REL, W) -- RELATED NAMES
C     RELCMP (REL, POS)
C     RELSTF (REL, STF, YEAR)
C
C     INDICES
C     NAMED OFFSETS ARE INITIALIZED IN BLOCK DATA BELOW
C
C     YEAR = 1..5 -- YEAR 1 IS CURRENT YEAR
C     W = FULL..ABBREV
C     CAT = <USER SUPPLIED>
C     SRV = <USER SUPPLIED>
C     POS = FIRST..LAST
C     AOFF = NUMERIC OFFSET
C     INFO = INFQAN..INFCST
C     DST = <USER SUPPLIED>
C     STF = TEACHR, AIDE, AIDTCH
C     REL = <USER SUPPLIED>
C     CST = CURDOL..ACTUAL
C
C-------
      BLOCK DATA
      IMPLICIT REAL (A-Z)
C     SETS THE VALUES FOR NAMED OFFSETS
C     NOTE THAT A GREAT DEAL OF BINDING OCCURS AT COMPILE
C     TIME BECAUSE OF THE SUBPROGRAM
C
C
```

```
C
      COMMON /COMTXT/ WHERE(8), WHO(8), WHAT(8), PAGE
      INTEGER PAGE
      COMMON /COMFIL/ PRIIN,PRIOU,SECOUT,PRINTR
      INTEGER PRIIN,PRIOU,SECOUT,PRINTR
      COMMON /COMPOS/ FIRST,LAST
      INTEGER FIRST,LAST
      COMMON /COMINF/ INFQAN,INFCST
      INTEGER INFQAN,INFCST
      COMMON /COMN/ FULL,ABBREV
      INTEGER FULL,ABBREV
      COMMON /COMSTF/ TEACHR, AIDE, AIDTCH
      INTEGER TEACHR, AIDE, AIDTCH
      COMMON/COMCST/ CURDOL,ACTUAL
      INTEGER CURDOL,ACTUAL
C
C     PAGE STARTS AT 1
C
      DATA PAGE /1/
C
C     POS ==> POSITION IN SERVICE COMPONENT VECTOR POINTED TO
C
      DATA FIRST /1/
      DATA LAST /2/
C
C     INFO ==> TYPE OF INFORMATION
C
      DATA INFQAN /1/
      DATA INFCST /2/
C
C     N ==> NAME TYPE
C
      DATA FULL /1/
      DATA ABBREV /2/
C
C     STF ==> STAFF TYPE
C
      DATA TEACHR /1/
      DATA AIDE /2/
      DATA AIDTCH /3/
C
C     CST ==> COSTS (PRESENT VALUE OR ACTUAL)
C
      DATA CURDOL /1/
      DATA ACTUAL /2/
      END
C******************** MAIN **********************************
      IMPLICIT REAL (A-Z)
C
C      ALGORITHM
C      2. CALL INPUT ROUTINE
C      3. CALL COMPUTATION ROUTINE
C      4. CALL OUTPUT ROUTINES
C
C
C     DIMENSION FUNDAMENTAL ARRAYS
      DIMENSION INFLTN(5), CATUDP(36,5)
      DIMENSION CATNAM(36,2,8), SRVDUP(36,36,5), SRVPRM(36,36,5)
      DIMENSION SRVNAM(36,2,8), SRVCMP(36,2)
      DIMENSION COMP(360,2), CMPNAM(360,8)
      DIMENSION SRVRAT(36,3,5), DSTSUP(36,5)
      DIMENSION SRVSTF(36,2,5), DSTSTF(36,2,5)
      DIMENSION DSTNAM(36,2,8), DSTCMP(36,2)
      DIMENSION RELSRV (36,36,5), RELNAM(36,2,8)
      DIMENSION RELCMP (100,2), RELSTF(100,2,5)
      DIMENSION RELRAT(36,3,5)
      DIMENSION SRVCST(36,2,5), RELCST(36,2,5), DSTCST(36,2,5)
      DIMENSION DSTPER(36)
      DIMENSION UPTO(6)
      INTEGER SRVCMP,RELCMP,DSTCMP
C
C     PARAMETERS IN COMMON
C
      COMMON /CONTOT/ TOTROL,TOTSPC
      DIMENSION TOTROL(5), TOTSPC(5)
      COMMON /COMPOS/ FIRST,LAST
      INTEGER FIRST,LAST
      COMMON /COMINF/ INFQAN,INFCST
      INTEGER INFQAN,INFCST
      COMMON /COMW/ FULL,ABBREV
      INTEGER FULL,ABBREV
      COMMON /COMSTF/ TEACHR, AIDE, AIDTCH
      INTEGER TEACHR, AIDE, AIDTCH
      COMMON /COMFIL/ PRIIN,PRIOU,SECOUT,PRINTR
      INTEGER PRIIN,PRIOU,SECOUT,PRINTR
      COMMON /COMBAS/ BASEYR,NYEARS
      INTEGER BASEYR,NYEARS
      COMMON /COMIFL/ CUMINF(5)
C
      INTEGER DISP,REENT,SRVSIZ,DSTSIZ,RELSIZ,ASIZ,AOFF
      INTEGER IFIX,CATSIZ,UPTONM,I,SECIN,EXTRA
      INTEGER NULL9
C
      LOGICAL REPL, UPTO, CONT
      LOGICAL YESNO
      LOGICAL NEWRUN
C
      OPEN(UNIT=20,ACCESS='SEQOUT',FILE='PRIIN.COP')
      OPEN(UNIT=22,ACCESS='SEQOUT',FILE='DUMMY',DISPOSE='DELETE')
      DUMMY = 22
      OPEN(UNIT=24,ACCESS='SEQOUT',FILE='OUTPUT.DAT',DISPOSE='PRINT')
      PRINTR = 24
      SRVSIZ = 36
      DSTSIZ = 36
      RELSIZ = 36
      ASIZ = 360
      AOFF = 1
      CATSIZ = 36
      PRIIN = 5
      PRIOU = 5
      SECOUT = 20
      NEWRUN = .TRUE.
      REPL = .FALSE.
      CONT = .FALSE.
      DO 50 I = 1, 6, 1
         UPTO(I) = .FALSE.
   50 CONTINUE
      WRITE (PRIOU,100)
  100 FORMAT (1X,'ARE YOU CONTINUING WITH A PARTIALLY ENTERED',/,
     #        1X,'DATA SET (Y OR N) ?')
      IF (YESNO(FOG)) GOTO 1000
      WRITE(PRIOU,200)
  200 FORMAT(1X,'ARE YOU CHANGING A PREVIOUSLY',/,
     #       1X,'ENTERED DATA SET (Y OR N) ?')
      IF(YESNO(FOO)) GOTO 9
C
    1 CALL WKSHT1 ( INFLTN)
      IF(CONT .AND. UPTO(1)) NEWRUN = .TRUE.
      IF(CONT .AND. UPTO(1)) CONT = .FALSE.
      IF(.NOT. NEWRUN) PRIIN = 21
      IF(.NOT. NEWRUN) PRIOU = DUMMY
      IF(CONT) READ(PRIIN,1075)
      IF (UPTO(1)) PRIIN = 5
      IF (UPTO(1)) PRIOU = 5
      IF(REPL .AND. DISP .NE. 1) READ(PRIIN,1075)
      IF(REPL .AND. DISP .EQ. 2) CALL SKIP
    2 CALL WKSHT2 (CATUDP, CATNAM, CATSIZ)
      IF(CONT .AND. UPTO(2)) NEWRUN = .TRUE.
      IF(CONT .AND. UPTO(2)) CONT = .FALSE.
      IF(.NOT. NEWRUN) PRIIN = 21
      IF(.NOT. NEWRUN) PRIOU = DUMMY
      IF(CONT) READ(PRIIN,1075)
      IF (UPTO(2)) PRIIN = 5
      IF (UPTO(2)) PRIOU = 5
      IF(REPL .AND. DISP .NE. 2) READ (PRIIN,1075)
      IF(REPL .AND. DISP .EQ. 3) CALL SKIP
    3 CALL WKSHT3 (SRVNAM, SRVCMP, RELSTF, RELSIZ,
     #     RELNAM,RELCMP,SRVSTF, COMP, CMPNAM, ASIZ,
     #     SRVSIZ, CATSIZ, AOFF)
      IF(CONT .AND. UPTO(3)) NEWRUN = .TRUE.
      IF(CONT .AND. UPTO(3)) CONT = .FALSE.
      IF(.NOT. NEWRUN) PRIIN = 21
      IF(.NOT. NEWRUN) PRIOU = DUMMY
      IF(CONT) READ(PRIIN,1075)
      IF (UPTO(3)) PRIIN = 5
      IF (UPTO(3)) PRIOU = 5
      IF(REPL .AND. DISP .NE. 3) READ (PRIIN,1075)
      IF(REPL .AND. DISP .EQ. 4) CALL SKIP
    4 CALL WKSHT4 (SRVDUP, SRVPRM, SRVNAM, CATNAM, CATUDP,
     #                  SRVSIZ, CATSIZ, RELSRV, RELNAM, RELSIZ)
      IF(CONT .AND. UPTO(4)) NEWRUN = .TRUE.
      IF(CONT .AND. UPTO(4)) CONT = .FALSE.
      IF(.NOT. NEWRUN) PRIIN = 21
      IF(.NOT. NEWRUN) PRIOU = DUMMY
      IF(CONT) READ(PRIIN,1075)
      IF (UPTO(4)) PRIIN = 5
      IF (UPTO(4)) PRIOU = 5
      IF(REPL .AND. DISP .NE. 4) READ (PRIIN,1075)
      IF(REPL .AND. DISP .EQ. 5) CALL SKIP
    5 CALL WKSHTB (TOTROL, CATUDP, CATNAM, SRVDUP,
     #                  SRVPRM, SRVNAM, CATSIZ, SRVSIZ,
     #                  RELSRV, RELSIZ, RELNAM)
      IF(CONT .AND. UPTO(5)) NEWRUN = .TRUE.
      IF(CONT .AND. UPTO(5)) CONT = .FALSE.
      IF(.NOT. NEWRUN) PRIIN = 21
      IF(.NOT. NEWRUN) PRIOU = DUMMY
      IF(CONT) READ(PRIIN,1075)
      IF (UPTO(5)) PRIIN = 5
      IF (UPTO(5)) PRIOU = 5
      IF(REPL .AND. DISP .NE. 5) READ (PRIIN,1075)
      IF(REPL .AND. DISP .EQ. 6) CALL SKIP
    6 CALL WKSHT5 (SRVDUP, SRVPRM, SRVNAM, SRVSTF,
     # SRVRAT, CATSIZ, SRVSIZ,RELRAT,RELSIZ,RELNAM,RELSRV,RELSTF)
      IF(CONT .AND. UPTO(6)) NEWRUN = .TRUE.
      IF(CONT .AND. UPTO(6)) CONT = .FALSE.
      IF(.NOT. NEWRUN) PRIIN = 21
      IF(.NOT. NEWRUN) PRIOU = DUMMY
      IF(CONT) READ(PRIIN,1075)
      IF (UPTO(6)) PRIIN = 5
      IF (UPTO(6)) PRIOU = 5
      IF(REPL .AND. DISP .NE. 6) READ (PRIIN,1075)
      IF(REPL .AND. DISP .EQ. 6) CALL SKIP
    7 CALL WKSHT6 (DSTNAM, DSTCMP, DSTSUP, DSTSTF, DSTPER,
     #             COMP, CMPNAM, ASIZ, DSTSIZ, AOFF)
      PRIIN = 5
      PRIOU = 5
      GOTO 8
C
 1000 NEWRUN = .FALSE.
      CONT = .TRUE.
C
C     THE FOLLOWING CODE IS INTENDED TO ALLOW THE USER TO REPLACE
C     WORKSHEETS OR TO CONTINUE AFTER PAUSING DURING A WORKSHEET
C     DISPATCH IS ACCORDING TO USER INPUT
C      LOGICAL UPTO IS USED TO INDICATE WHICH ROUTINE
C     SHOULD BE READ UP TO (INCLUSIVE)
C     REPL IS SET TO INDICATE THAT SOME WORKSHEET IS BEING REPLACED.
C     REENT IS THE FILE RE-ENTRY INTEGER.
C      CONT IS SET TO INDICATE CONTINUING ENTRY AFTER A PAUSE
C
 1022 WRITE (PRIOU,1050)
 1050 FORMAT(/1X,'1 => DISTRICT INFORMATION',
     #        /1X,'2 => SPECIAL EDUCATION CATEGORIES',
     #     /1X,'3 => INSTRUCTIONAL',
     #     ' PROGRAMS AND RELATED SERVICES (3A AND 3B)',
     #      /1X,'4 => STUDENT PLACEMENTS CURRENT YEAR (4A AND 4B)',
     #        /1X,'5 => ANTICIPATED STUDENT PLACEMENTS (4A AND 4B)',
     #        /1X,'6 => PERSONNEL RATIOS',
     #        /1X,'7 => DISTRICT SUPPORT SERVICES')
      WRITE(PRIOU,1060)
 1060 FORMAT (/1X,'WHAT WAS THE LAST WORKSHEET INPUT',/,
     #          1X,'(1 THROUGH 6)')
      READ (PRIIN,*) XIN
      UPTONM = IFIX (XIN)
      IF (UPTONM .LT. 1 .OR. UPTONM .GT. 6) GOTO 1022
      UPTO (UPTONM) = .TRUE.
      CLOSE(UNIT=20,DISPOSE='DELETE',FILE='PRIIN.COP')
      OPEN(UNIT=20,ACCESS='SEQOUT',FILE='PRIIN.COP')
      OPEN(UNIT=21,ACCESS='SEQIN',FILE='PRIIN.ATO')
      PRIIN = 21
      SECOUT = 20
      PRIOU = DUMMY
 1075 FORMAT('DUMMY READ')
      GOTO 1
    8 NEWRUN = .FALSE.
      WRITE (PRIOU,1100)
 1100 FORMAT (1X,'WOULD YOU LIKE TO REPLACE A WORKSHEET (Y OR N)?')
      IF (.NOT. YESNO(FOO)) GOTO 4000
    9 NEWRUN = .FALSE.
      CONT = .FALSE.
      WRITE(PRIOU,1050)
      WRITE (PRIOU,1200)
1200  FORMAT (1X,'ENTER THE NUMBER OF THE WORKSHEET',/,
     #        1X,'YOU WANT TO REPLACE')
      READ (PRIIN,*) DISP
      IF(DISP .LT. 1 .OR. DISP .GT. 7) GOTO 8
      CLOSE(UNIT=20,DISPOSE='DELETE',FILE='PRIIN.COP')
      OPEN(UNIT=21,ACCESS='SEQIN',FILE='PRIIN.ATO')
      OPEN(UNIT=20,ACCESS='SEQOUT',FILE='PRIIN.COP')
      PRIIN = 21
      PRIOU = DUMMY
      REPL = .TRUE.
      DO 1300 I1 = 1,6,1
      UPTO(I1) = .FALSE.
1300  CONTINUE
      IF(DISP .GT. 1) UPTO(DISP-1)= .TRUE.
      IF(DISP .EQ. 1) PRIIN = 5
      IF(DISP .EQ. 1) PRIOU = 5
      IF(DISP .EQ. 1) CALL SKIP
      GOTO 1
4000  CALL  CALC(TOTSPC,CATUDP,SRVPRM,SRVDUP,RELSRV,SRVSIZ,
     #               RELSIZ,CATSIZ,SRVCST,RELCST,DSTCST,DSTPER,
     #              DSTSIZ,SRVCMP,RELCMP,DSTCMP,COMP,INFLTN,
     #              SRVSTF,RELSTF,SRVRAT,RELRAT,DSTSUP,DSTSTF)
      CALL OUT1(TOTROL,TOTSPC,INFLTN)
      CALL OUT2(CATUDP,CATNAM,TOTROL,TOTSPC,CATSIZ)
      CALL OUT3 (SRVDUP, SRVPRM, RELSRV, SRVSIZ, RELSIZ
     #               ,CATSIZ,RELNAM,SRVNAM)
      CALL OUT4(CATUDP,SRVPRM,SRVDUP,RELSRV,
     #           CATSIZ,SRVSIZ,RELSIZ,CATNAM,SRVNAM,RELNAM)
      CALL OUT5(SRVCMP,SRVNAM,SRVCST,SRVSIZ,RELCMP,
     #               RELNAM,RELCST,RELSIZ,COMP,CMPNAM)
      CALL OUT6(SRVNAM,SRVRAT,RELNAM,RELRAT,SRVSIZ,RELSIZ)
      CALL OUT7(SRVDUP,SRVPRM,SRVRAT,RELRAT,RELSRV,
     #               CATNAM,CATSIZ,SRVSIZ,RELSIZ)
      CALL OUT8(SRVSTF,SRVNAM,SRVSIZ,RELSTF,RELNAM,RELSIZ)
      CALL OUT9(CATNAM,SRVNAM,RELNAM,SRVPRM,SRVDUP,SRVSTF,
     #   RELSRV,RELSTF,SRVRAT,RELRAT,SRVCMP,RELCMP,COMP,
     #   RELCST,SRVCST,SRVSIZ,RELSIZ,CATSIZ)
      CALL OUT10(CATNAM,SRVNAM,RELNAM,SRVPRM,SRVDUP,SRVSTF,
     #   RELSRV,RELSTF,SRVRAT,RELRAT,SRVCMP,RELCMP,COMP,
     #   RELCST,SRVCST,SRVSIZ,RELSIZ,CATSIZ)
      CALL OUT113(CATNAM,SRVNAM,RELNAM,SRVPRM,SRVDUP,SRVSTF,
     #   RELSRV,RELSTF,SRVRAT,RELRAT,SRVCMP,RELCMP,COMP,
     #   RELCST,SRVCST,SRVSIZ,RELSIZ,CATSIZ,CATUDP)
      CALL OUT14(SRVPRM,SRVDUP,SRVNAM,SRVSIZ,RELSRV,
     #            RELNAM, RELSIZ,CATSIZ)
      CALL OUT15(CATUDP, CATNAM, CATSIZ)
      CALL OUT16(SRVPRM,SRVDUP,SRVNAM,SRVSIZ,RELSRV,
     #            RELNAM,RELSIZ,CATSIZ,SRVSTF,RELSTF)
      CALL OUT17(DSTCMP,DSTNAM,DSTCST,DSTSIZ,DSTSTF,DSTPER,
     #               DSTSUP,COMP,CMPNAM)
      CALL  OUT18(DSTSUP,DSTNAM,DSTCST,DSTSTF,DSTSIZ)
C
      CLOSE(UNIT=21,FILE='PRIIN.ATO',DISPOSE='DELETE')
      CLOSE(UNIT=20,FILE='PRIIN.ATO',DISPOSE='RENAME')
      CLOSE(UNIT=22,FILE='DUMMY',DISPOSE='DELETE')
      CLOSE(UNIT=24,FILE='OUTPUT.DAT',DISPOSE='SAVE')
C      CHANGE 'SAVE' TO 'PRINT' ON UNIT=24 IN FINAL COPY
      STOP
      END
```

```
C
C------
      REAL FUNCTION CPREAL (INFIL,OUTFIL)
C     RETURNS A REAL NUMBER OF THE USER
C     READ FROM INFIL AND COPIED TO OUTFIL
C
      INTEGER INFIL,OUTFIL
21      READ (INFIL,*, ERR=100) CPREAL
       WRITE(OUTFIL,*) CPREAL
      RETURN
  100 READ(INFIL,10)
   10 FORMAT('DUMMY READ')
      GOTO 21
      END
C-----
      LOGICAL FUNCTION YESNO(FOO)
C     RETURNS TRUE IF Y IS READ IN FROM THE INPUT FILE
C     RETURNS FALSE IF N IS READ IN FROM THE INPUT FILE
C     IF NEITHER IS TYPED, AANOTHER CHARACTER IS READ
      COMMON /COMFIL/ PRIIN,PRIOU,SECOUT,PRINTR
      INTEGER PRIIN,PRIOU,SECOUT,PRINTR
      INTEGER I
      DATA XN/'N'/, XY/'Y'/
      YESNO = .FALSE.
  10  READ (PRIIN,100) CHARS
  100 FORMAT (A1)
      IF (CHARS .NE. XY .AND. CHARS .NE. XN) GOTO 10
      IF (CHARS. EQ. XY) YESNG = .TRUE.
      RETURN
      END
C------
      SUBROUTINE CSTRNG (CHAR32,INFIL,OUTFIL)
C     READS IN A 32 CHARACTER STRING FROM INFIL TO THE
C     8 ELEMENT ARRAY CHAR32
C     WRITES THE STRING TO OUTFIL
      DIMENSION CHAR32 (3)
      INTEGER INFIL,OUTFIL
      CALL ISTRNG(CHAR32,INFIL)
      CALL OSTRNG (CHAR32,OUTFIL)
      RETURN
      END
C
C------
      SUBROUTINE ISTRNG(CHAR32,INFIL)
C     THIS ROUTINE READS IN A 32 CHARACTER STRING FROM INFIL
C     TO THE EIGHT ELEMENT ARRAY CHAR32
      DIMENSION CHAR32 (8)
      REAL CHAR32
      INTEGER INFIL,I
      READ (INFIL,100) (CHAR32(I), I = 1,8,1)
  100 FORMAT (8A4)
      RETURN
      END
C
C-----
      SUBROUTINE OSTRNG (CHAR32,OUTFIL)
C     THIS ROUTINE WRITES A 32 CHARACTER STRING TO OUTFIL
C
      DIMENSION CHAR32(8)
      REAL CHAR32
      INTEGER I, OUTFIL
      WRITE (OUTFIL,100) (CHAR32(I), I = 1, 8, 1)
  100 FORMAT (8A4)
      RETURN
      END
C
C------
      SUBROUTINE SKIP
  100 FORMAT(1X,A4)
   10 READ(21,100) CHARS
      WRITE(5,200) CHARS
      IF(CHARS .NE. 'END ') GOTO 10
      RETURN
  200 FORMAT(1X,'SKIPPING ONE RECORD WITH CHARS = ',A4)
      END
C
C------
      SUBROUTINE WKSHT1 ( INFLTN)
      IMPLICIT REAL (A-Z)
C     INPUT FOR WORKSHEET ONE
C     PARAMETERS ARE THE SAME AS THE ACTUALS
      DIMENSION INFLTN(5)
      COMMON /CONTOT/ TOTROL,TOTSPC
      DIMENSION TOTROL(5), TOTSPC(5)
      COMMON /COMBAS/ BASEYR,NYEARS
      INTEGER BASEYR,NYEARS
      COMMON /COMFIL/ PRIIN,PRIOU,SECOUT,PRINTR
      INTEGER PRIIN,PRIOU,SECOUT,PRINTR
      INTEGER IFIX, YR, CURYR, CURYR1, SEP
      COMMON /COMTXT/ WHERE(8), WHO(8), WHAT(8), PAGE
      INTEGER PAGE
      WRITE(PRIOU,9)
    9 FORMAT(/1X,'WORKSHEET 1',/1X,'DISTRICT INFORMATION')
      WRITE (PRIOU,10)
   10 FORMAT (1X,'ENTER THE DISTRICT NAME')
      CALL CSTRNG(WHERE,PRIIN,SECOUT)
      WRITE (PRIOU,11)
   11 FORMAT (1X,'ENTER THE AGE GROUP')
      CALL CSTRNG(WHO,PRIIN,SECOUT)
      WRITE (PRIOU,12)
   12 FORMAT (1X,'ENTER THE RUN DESIGNATION')
      CALL CSTRNG(WHAT,PRIIN,SECOUT)
C
      WRITE (PRIOU,20)
   20 FORMAT (/1X,'ENTER THE CURRENT YEAR')
      XIN = CPREAL (PRIIN,SECOUT)
      BASEYR = IFIX (XIN)
  29  WRITE(PRIOU,30)
  30  FORMAT(1X,'HOW MANY YEARS DO YOU WANT TO PLAN AHEAD?',
     # /1X,'(MAXIMUM OF 4)')
      XIN = CPREAL (PRIIN,SECOUT)
      NYEARS = IFIX (XIN)
      IF((NYEARS.GT.4).OR.(NYEARS.LT.1)) GOTO 29
      NYEARS=NYEARS+1
C
      WRITE (PRIOU,100)
  100 FORMAT (/1X,'ENTER THE TOTAL STUDENT POPULATION',/,
     #            1X,'FOR THE EACH OF THE FOLLOWING YEARS:')
      DO 200 YR = 1, NYEARS, 1
          CURYR = BASEYR + YR - 1
          CURYR1 = CURYR + 1 - 1900
          WRITE (PRIOU,210) CURYR, CURYR1
  210     FORMAT (/1X,I4,'-',I2)
          TOTROL (YR) = CPREAL(PRIIN,SECOUT)
  200 CONTINUE
      WRITE (PRIOU,300)
  300 FORMAT (/1X,'ENTER THE INFLATION RATE (%)',/,
     #             1X,'FOR THE EACH OF THE FOLLOWING YEARS:')
      DO 400 YR = 1, NYEARS, 1
          CURYR = BASEYR + YR - 1
          CURYR1 = CURYR + 1 - 1900
          WRITE (PRIOU,410) CURYR, CURYR1
  410     FORMAT (/1X,I4,'-',I2)
          INFLTN (YR) = CPREAL(PRIIN,SECOUT)
  400 CONTINUE
      WRITE(SECOUT,500)
  500 FORMAT(1X,'END OF DATA FOR WORKSHEET 1')
      RETURN
      END
C
C------
      SUBROUTINE WKSHT2 (CATUDP, CATNAM, CATSIZ)
      IMPLICIT REAL (A-Z)
C     INPUT FOR WORKSHEET TWO
C     CATUDP AND CATNAM ARE ACTUAL, CATSIZ IS THE SIZE OF THEM
C
      COMMON /COMW/ FULL,ABEREV
      INTEGER FULL,ABBREV
      COMMON /COMFIL/ PRIIN,PRIOU,SECOUT,PRINTR
      INTEGER PRIIN,PRIOU,SECOUT,PRINTR
      INTEGER CATSIZ, CAT, J, ONE, SEP
      DIMENSION CATUDP(36,5), CATNAM(36,2,8)
      DIMENSION NAME32(8)
      DATA XXXX/'XXXX'/
      WRITE (PRIOU,100)
  100 FORMAT (/1X,'WORKSHEET 2',/1X,'SPECIAL EDUCATION CATEGORIES',
     #      //1X,'ENTER THE NAME OF EACH CATEGORY SERVED DURING',
     #      ' THE CURRENT YEAR AND THE NUMBER OF',/1X,
     #     'STUDENTS IN EACH',
     #      1X,'CATEGORY SERVED DURING THE CURRENT YEAR:')
      CATSIZ = 1
   33 WRITE (PRIOU,125)
  125 FORMAT (/1X,'ENTER THE CATEGORY NAME (ENTER XXXX WHEN FINISHED)')
          CALL CSTRNG(NAME32,PRIIN,SECOUT)
          DO  150 J=1,8,1
             CATNAM(CATSIZ,FULL,J)=NAME32(J)
  150        CONTINUE
      IF (CATNAM (CATSIZ,FULL,1) .EQ. XXXX) GOTO 200
          WRITE (PRIOU,161)
  161     FORMAT (1X,'ENTER THE CURRENT NUMBER OF STUDENTS SERVED')
          CATUDP (CATSIZ,1) = CPREAL(PRIIN,SECOUT)
      CATSIZ = CATSIZ + 1
      GOTO 33
  200 CONTINUE
      IF ( CATSIZ .GT. 1) CATSIZ = CATSIZ - 1
      WRITE(SECOUT,300)
  300 FORMAT(1X,'END OF DATA FOR WORKSHEET 2')
      RETURN
      END
C
```

```
C-----
      SUBROUTINE WKSHT3 (SRVNAM, SRVCMP, RELSTF, RELSIZ,
     #     RELNAM,RELCMP,SRVSTF, COMP, CMPNAM, ASIZ,
     #     SRVSIZ, CATSIZ, AOFF)
      IMPLICIT REAL (A-Z)
      INTEGER ASIZ,SRVSIZ, RELSIZ, CATSIZ, SEP, ONE
C
C     INPUT FROM WORKSHEET THREE
C     ALL PARAMETERS ARE ACTUALS EXCEPT ASIZ AND SRVXIZ
C
      DATA XXXX /'XXXX'/
C
      DIMENSION SRVNAM(36,2,8), SRVCMP(36,2)
      DIMENSION SRVSTF(36,2,5), COMP(360,2)
      DIMENSION CMPNAM(360,6)
      DIMENSION RELNAM (36, 2, 8)
      DIMENSION RELCMP (36, 2), RELSTF (36, 2, 5)
      DIMENSION NAME32(8)
C
      COMMON /COMFIL/ PRIIN,PRIOU,SECOUT,PRINTR
      INTEGER PRIIN,PRIOU,SECOUT,PRINTR
      COMMON /COMPOS/ FIRST,LAST
      INTEGER FIRST,LAST
      COMMON /COMINF/ INFQAN,INFCST
      INTEGER INFQAN,INFCST
      COMMON /COMW/ FULL,ABBREV
      INTEGER FULL,ABBREV
      COMMON /COMSTF/ TEACHR, AIDE, AIDTCH
      INTEGER TEACHR, AIDE, AIDTCH
C
      INTEGER J,AOFF,REL,SRV,CMP,SRVCMP,RELCMP
C
      WRITE (PRIOU,20)
   20 FORMAT (/1X,'WORKSHEET 3A',/,1X,'INSTRUCTIONAL PROGRAMS',//
     #         1X,'ENTER INFORMATION ABOUT INSTRUCTIONAL PROGRAMS')
      SRVSIZ = 1
      SRVCMP (SRVSIZ, LAST) = 0
      SRVCMP (SRVSIZ, FIRST)= 0
      SRVSTF( SRVSIZ, TEACHR,1) = 0
      SRVSTF( SRVSIZ, AIDE ,1) = 0
   30     WRITE (PRIOU,50)
   50     FORMAT (/1X,'ENTER THE PROGRAM NAME',
     #            1X,'(ENTER XXXX WHEN ALL PROGRAMS',
     #             1X,'HAVE BEEN ENTERED)')
          CALL CSTRNG(NAME32,PRIIN,SECOUT)
          DO 100 J=1,8,1
             SRVNAM(SRVSIZ,FULL,J)=NAME32(J)
  100        CONTINUE
          IF (SRVNAM(SRVSIZ, FULL, 1) .EQ.XXXX) GOTO 2000
          SRVCMP (SRVSIZ, FIRST) = 0
C         RESOURCE COMPONENT LOOP
  105            WRITE (PRIOU,110)
  110          FORMAT (/1X,'ENTER THE TYPE OF RESOURCE',/,
     #       1X,'(ENTER XXXX WHEN ALL RESOURCES FOR THE PROGRAM',
     #       1X,'HAVE BEEN ENTERED)')
               CALL CSTRNG(NAME32,PRIIN,SECOUT)
               DO 120 J=1,8,1
                 CMPNAM(AOFF,J)=NAME32(J)
  120            CONTINUE
               IF (CMPNAM(AOFF,1) .EQ. XXXX) GOTO 800
             IF (SRVCMP(SRVSIZ,FIRST) .EQ. 0)
     #             SRVCMP(SRVSIZ,FIRST) = AOFF
             SRVCMP (SRVSIZ,LAST) = AOFF
              WRITE (PRIOU,130)
  130         FORMAT (1X,'ENTER THE PRICE OF ONE')
              COMP (AOFF, INFCST) = CPREAL (PRIIN,SECOUT)
              COMP (AOFF, INFQAN) = 1.0
              AOFF = AOFF + 1
          GOTO 105
  800     WRITE (PRIOU,810)
  810     FORMAT (/1X,'ENTER THE TOTAL NUMBER OF TEACHERS (FTE)',
     #            1X,'CURRENTLY ALLOCATED TO THIS PROGRAM')
          SRVSTF(SRVSIZ,TEACHR,1) = CPREAL(PRIIN,SECOUT)
          WRITE (PRIOU,820)
  820     FORMAT (1X,'ENTER THE TOTAL NUMBER OF AIDES (FTE)',
     #         1X,'CURRENTLY ALLOCATED TO THIS PROGRAM')
          SRVSTF (SRVSIZ, AIDE, 1) = CPREAL(PRIIN,SECOUT)
 1000     CONTINUE
          SRVSIZ = SRVSIZ + 1
          GOTO 30
 2000 CONTINUE
      IF(SRVSIZ.GT.1) SRVSIZ=SRVSIZ-1
C
      WRITE (PRIOU,22)
   22 FORMAT (/1X,'WORKSHEET 3B',/,1X,'RELATED SERVICES',//
     #   1X,'ENTER INFORMATION ABOUT RELATED SERVICES')
      RELSIZ = 1
      RELCMP (RELSIZ, LAST) = 0
      RELCMP (RELSIZ, FIRST) = 0
      RELSTF(RELSIZ, TEACHR,1) = 0
      RELSTF(RELSIZ, AIDE,1) = 0
   32     WRITE (PRIOU,52)
   52     FORMAT (/1X,'ENTER THE SERVICE NAME',
     #            1X,'(ENTER XXXX WHEN ALL SERVICES',
     #             1X,'HAVE BEEN ENTERED)')
          CALL CSTRNG(NAME32,PRIIN,SECOUT)
          DO 122 J=1,8,1
             RELNAM(RELSIZ,FULL,J)=NAME32(J)
  122        CONTINUE
          IF (RELNAM(RELSIZ, FULL, 1) .EQ.XXXX) GOTO 2222
          RELCMP (RELSIZ, FIRST) = 0
C         RESOURCE COMPONENT LOOP
  125           WRITE (PRIOU,112)
  112         FORMAT (/1X,'ENTER THE TYPE OF THE RESOURCE',/1X,
     #     1X,'(ENTER XXXX WHEN ALL RESOURCES FOR THE SERVICE',
     #     1X,'HAVE BEEN ENTERED)')
              CALL CSTRNG(NAME32,PRIIN,SECOUT)
               DO 142 J=1,8,1
                  CMPNAM(AOFF,J)=NAME32(J)
  142            CONTINUE
              IF (CMPNAM(AOFF,1) .EQ. XXXX) GOTO 808
          IF (RELCMP(RELSIZ,FIRST) .EQ. 0)
     #            RELCMP(RELSIZ,FIRST) = AOFF
          RELCMP (RELSIZ,LAST) = AOFF
              WRITE (PRIOU,132)
  132         FORMAT (1X,'ENTER THE PRICE OF ONE')
              COMP (AOFF, INFCST) = CPREAL (PRIIN,SECOUT)
              COMP (AOFF, INFQAN) = 1.0
              AOFF = AOFF + 1
          GOTO 125
 808      WRITE (PRIOU,812)
 812      FORMAT (/1X,'ENTER THE TOTAL NUMBER OF PROFESSIONAL',/,
    #           1X,'PERSONNEL CURRENTLY ALLOCATED TO THIS SERVICE')
          RELSTF(RELSIZ,TEACHR,1) = CPREAL(PRIIN,SECOUT)
          WRITE (PRIOU,822)
 822      FORMAT (1X,'ENTER THE TOTAL NUMBER OF AIDES',/,
    #           1X,'CURRENTLY ALLOCATED TO THIS SERVICE')
          RELSTF (RELSIZ, AIDE, 1) = CPREAL(PRIIN,SECOUT)
 1222     CONTINUE
          RELSIZ = RELSIZ + 1
          GOTO 32
 2222 CONTINUE
      IF(RELSIZ.GT.1) RELSIZ=RELSIZ-1
      WRITE(SECOUT,3000)
 3000 FORMAT(1X,'END OF DATA FOR WORKSHEET 3')
C
      RETURN
      END
C
C------
      SUBROUTINE WKSHT4 (SRVDUP, SRVPRM, SRVNAM, CATNAM, CATUDP,
     #                   SRVSIZ, CATSIZ, RELSRV, RELNAM, RELSIZ)
      IMPLICIT REAL (A-Z)
      COMMON /CONFIL/ PRIIN,PRIOU,SECOUT,PRINTR
      INTEGER PRIIN,PRIOU,SECOUT,PRINTR
      COMMON /COMN/ FULL,ABBREV
      INTEGER FULL,ABBREV
      INTEGER SRVSIZ, CATSIZ,CAT,SRV,J,RELSIZ,REL, SEP, ONE
      DIMENSION CATUDP(36, 5)
      DIMENSION SRVDUP(36, 36, 5)
      DIMENSION SRVPRM(36, 36, 5)
      DIMENSION RELSRV(36, 36, 5)
      DIMENSION SRVNAM(36,2,8), CATNAM(36,2,8)
      DIMENSION RELNAM (36,2,8)
C
      WRITE (PRIOU,10)
   10 FORMAT (/1X,'WORKSHEET 4A AND 4B',/1X,'CURRENT STUDENT PLACEMENT')
      DO 2000 CAT = 1, CATSIZ, 1
          WRITE (PRIOU,100) (CATNAM(CAT,FULL,J),J=1,8,1),CATUDP(CAT,1)
 100      FORMAT (//1X,8A4,/,1X,'TOTAL STUDENTS =',F9.0,/,
    #             1X,'ENTER THE NUMBER OF STUDENTS IN THIS',
    #             1X,'CATEGORY WHOSE PRIMARY PRIMARY PLACEMENT',
    #             1X,'IS IN:',/)
          TOT = CATUDP (CAT,1)
 105      DO 1000 SRV = 1,SRVSIZ,1
              WRITE (PRIOU,110) (SRVNAM(SRV, FULL, J), J = 1,8,1)
 110          FORMAT (/1X,8A4)
              SRVPRM(SRV,CAT,1) = CPREAL(PRIIN,SECOUT)
              TOT = TOT - SRVPRM(SRV,CAT,1)
 1000     CONTINUE
          IF (TOT .GT. -1.0 .AND. TOT .LT. 1.0) GOTO 1200
C         IF WE ARE STILL HERE, THE TOTALS DONT MATCH
          WRITE (PRIOU,1100) TOT
 1100     FORMAT (/1X,'THE TOTAL YOU HAVE INDICATED DIFFERS FROM',/,
    #             1X,'THE TOTAL YOU GAVE ON WORKSHEET TWO BY',F5.0,/,
    #             1X,'RE-ENTER THE PRIMARY PLACEMENTS')
          TOT = CATUDP (CAT,1)
          GOTO 105
 1200     CONTINUE
          WRITE (PRIOU,1300)
 1300     FORMAT (//1X,'ENTER THE NUMBER OF STUDENTS IN THIS',
     #   /1X,'CATEGORY WHO HAVE ADDITIONAL PLACEMENTS IN:')
      DO 1400 SRV = 1,SRVSIZ,1
              WRITE (PRIOU,1310) (SRVNAM(SRV, FULL, J), J = 1,8,1)
 1310         FORMAT (/1X,8A4)
              SRVDUP(SRV,CAT,1) = CPREAL(PRIIN,SECOUT)
 1400     CONTINUE
C
          WRITE (PRIOU,1366) (CATNAM(CAT,FULL,J), J=1,8,1)
 1366     FORMAT (//1X,'ENTER RELATED SERVICES',/,
     #            1X,'PLACEMENTS FOR ',8A4)
      DO 1466 REL = 1,RELSIZ,1
              WRITE (PRIOU,1316) (RELNAM(REL, FULL, J), J = 1,8,1)
 1316         FORMAT (/1X,8A4)
              RELSRV(REL,CAT,1) = CPREAL(PRIIN,SECOUT)
 1466     CONTINUE
C
 2000 CONTINUE
      WRITE(SECOUT,3000)
 3000 FORMAT(1X,'END OF DATA FOR WORKSHEET 4')
C
      RETURN
      END
C-----
      SUBROUTINE WKSHTB (TOTROL, CATUDP, CATNAM, SRVDUP,
     #                   SRVPRM, SRVNAM, CATSIZ, SRVSIZ,
     #                   RELSRV, RELSIZ, RELNAM)
      IMPLICIT REAL (A-Z)
C     HANDLE THE INPUT FOR WORKSHEET FIVE
C     NOTE: THIS ROUTINE MUST DO SOME OUTPUT AND SOME CALCULATIONS
      COMMON /COMFIL/ PRIIN,PRIOU,SECOUT,PRINTR
      INTEGER PRIIN,PRIOU,SECOUT,PRINTR
      COMMON /COMN/ FULL,ABBREV
      INTEGER FULL,ABBREV
      DATA N /'N'/
      INTEGER CATSIZ,SRVSIZ,CAT,SRV,J,YEAR,CURYR,CURYR1,
     #        REL,SEP,ONE,CMP
      INTEGER RELSIZ,  FIVE
      COMMON /COMBAS/ BASEYR,NYEARS
      INTEGER BASEYR,NYEARS
      DIMENSION CATUDP(36, 5)
      DIMENSION SRVDUP(36, 36, 5)
      DIMENSION SRVPRM(36, 36, 5)
      DIMENSION SRVNAM(36,2,8), CATNAM(36,2,8)
      DIMENSION RELSRV(36, 36, 5)
      DIMENSION RELNAM(36,2,8)
      DIMENSION TOTROL(5)
      LOGICAL YESNO
C
      SEP = 0
      FIVE = 5
      WRITE (PRIOU,10)
   10 FORMAT (/1X,'INFORMATION FOR WORKSHEET 4A AND 4B',//,
     #        1X,'CURRENT PLACEMENT STATISTICS')
      DO 1000 CAT = 1, CATSIZ, 1
          WRITE (PRIOU,100) (CATNAM(CAT,FULL,J),J = 1,8,1)
  100     FORMAT (/1X,'CATEGORY: ',8A4)
 9901     PREV = (CATUDP(CAT,1) / TOTROL(1)) * 100
          WRITE (PRIOU,110) PREV, CATUDP(CAT,1)
  110     FORMAT (7X,'CURRENT PREVALENCE RATE = ',F6.3,'%',/1X,
     #            7X,'TOTAL IN CATEGORY =',F5.0)
          WRITE (PRIOU,120)
  120     FORMAT (/1X,'PRIMARY PROGRAM PLACEMENT')
          DO 500 SRV = 1, SRVSIZ, 1
              PERCNT = 0
              IF(CATUDP(CAT,1).GT.0)
     #        PERCNT = (SRVPRM(SRV,CAT,1) / CATUDP(CAT,1)) * 100.0
              WRITE (PRIOU,200) (SRVNAM(SRV,FULL,J),J = 1,8,1),
     #                     PERCNT, SRVPRM(SRV,CAT,1)
  200         FORMAT (7X,8A4,1X, F5.0,'%',F8.0)
  500     CONTINUE
              WRITE (PRIOU,520)
  520         FORMAT (1X,'ADDITIONAL PLACEMENT')
          DO 750 SRV = 1, SRVSIZ, 1
              PERCNT = 0
              IF(CATUDP(CAT,1).GT.0)
     #        PERCNT = (SRVDUP(SRV,CAT,1) / CATUDP(CAT,1)) * 100.0
              WRITE (PRIOU,244) (SRVNAM(SRV,FULL,J),J = 1,8,1),
     #                     PERCNT, SRVDUP(SRV,CAT,1)
  244         FORMAT (7X,8A4,1X, F5.0,'%',F8.0)
  750     CONTINUE
              WRITE (PRIOU,720)
  720         FORMAT (1X,'RELATED SERVICES')
          DO 950 REL = 1, RELSIZ, 1
              PERCNT = 0
              IF(CATUDP(CAT,1).GT.0)
     #        PERCNT = (RELSRV(REL,CAT,1) / CATUDP(CAT,1)) * 100.0
              WRITE (PRIOU,444) (RELNAM(REL,FULL,J),J = 1,8,1),
     #                     PERCNT, RELSRV(REL,CAT,1)
  444         FORMAT (7X,8A4,1X, F5.0,'%',F8.0)
  950     CONTINUE
 1000 CONTINUE
C
C     THE USER MAY WANT TO EXAMINE THIS OUTPUT BEFORE CONTINUING
C
      WRITE(SECOUT,1010)
 1010 FORMAT('NO DELAY')
      WRITE (PRIOU,1050)
 1050 FORMAT (1X,'WOULD YOU LIKE TO DELAY THE COMPLETION OF THIS'/,
     #       1X,'SESSION TO EXAMINE YOUR OUTPUT (Y OR N) ?')
      IF (.NOT. YESNO(FOO)) GOTO 1095
C     IF WE ARE STILL HERE, PAUSE
      STOP
 1095 CONTINUE
      WRITE (PRIOU,1100)
 1100 FORMAT (/1X,'ENTER INFORMATION ABOUT THE ANTICIPATED',
     #       1X,'NUMBERS AND PLACEMENTS OF STUDENTS')
      DO 2000 CAT = 1, CATSIZ, 1
 9902    WRITE (PRIOU,100) (CATNAM(CAT,FULL,J),J = 1,8,1)
         DO 1200 YEAR = 2,NYEARS,1
               CURYR = BASEYR + YEAR - 1
               CURYR1 = CURYR + 1 - 1900
 9903          WRITE (PRIOU,1222) CURYR, CURYR1
 1222          FORMAT (/1X,'FOR THE YEAR ',I4,'-',I2)
               WRITE (PRIOU,1236)
 1236          FORMAT (/1X,'ENTER THE ANTICIPATED NUMBER',/,
     #                1X,'OF STUDENTS IN THIS CATEGORY')
               CATUDP (CAT, YEAR) = CPREAL (PRIIN,SECOUT)
               WRITE (PRIOU,1333)
 1333          FORMAT (/1X,'ENTER THE ANTICIPATED NUMBER OF',
     #         ' STUDENTS IN THIS CATEGORY WHOSE PRIMARY',/1X,
     #         'PLACEMENT WILL BE IN:',/)
              TOT = CATUDP (CAT,YEAR)
 3105         DO 4000 SRV = 1,SRVSIZ,1
                  WRITE (PRIOU,3110) (SRVNAM(SRV, FULL, J), J = 1,8,1)
 3110             FORMAT (1X,8A4)
                  SRVPRM(SRV,CAT,YEAR) =CPREAL(PRIIN,SECOUT)
                  TOT = TOT - SRVPRM(SRV,CAT,YEAR)
 4000         CONTINUE
              IF (TOT .GT. -10.0 .AND. TOT .LT. 10.0) GOTO 4200
C
C             IF WE ARE STILL HERE, THE TOTALS DONT MATCH
C
              WRITE (PRIOU,4100) TOT
 4100         FORMAT (/1X,'THE TOTAL INDICATED DIFFERS FROM',/,
     #                1X,'THE TOTAL GIVEN ABOVE BY',F5.0,/,
     #                1X,'RE-ENTER THE PRIMARY PLACEMENTS')
              TOT = CATUDP (CAT,YEAR)
              GOTO 3105
 4200         CONTINUE
              WRITE (PRIOU,4300)
 4300         FORMAT (//1X,'ENTER THE  ANTICIPATED NUMBER OF'
     #        ,1X,'STUDENTS IN THIS CATEGORY WHO WILL HAVE',
     #        1X,'ADDITIONAL PLACEMENTS IN:'/)
              DO 4400 SRV = 1,SRVSIZ,1
                  WRITE (PRIOU,4310) (SRVNAM(SRV, FULL, J), J = 1,8,1)
 4310             FORMAT (1X,8A4)
                  SRVDUP(SRV,CAT,YEAR) = CPREAL(PRIIN,SECOUT)
 4400         CONTINUE
              WRITE (PRIOU,5300)
 5300         FORMAT (//1X,'ENTER THE ANTICIPATED NUMBER',
     #         1X,'OF STUDENTS IN THE CATEGORY',/1X,'WHO WILL',
     #        1X,'RECEIVE RELATED SERVICES:',/)
              DO 5400 REL = 1,RELSIZ,1
                  WRITE (PRIOU,5310) (RELNAM(REL, FULL, J), J = 1,8,1)
 5310             FORMAT (1X,8A4)
                  RELSRV(REL,CAT,YEAR) = CPREAL(PRIIN,SECOUT)
 5400         CONTINUE
 1200     CONTINUE
 2000 CONTINUE
      WRITE(SECOUT,6000)
 6000 FORMAT(1X,'END OF DATA FOR WORKSHEET B')
C
      RETURN
      END
C------
C
      SUBROUTINE WKSHT5 (SRVDUP, SRVPRM, SRVNAM, SRVSTF,
     #  SRVRAT, CATSIZ, SRVSIZ,RELRAT,RELSIZ,RELNAM,RELSRV,RELSTF)
      IMPLICIT REAL (A-Z)
C
C     PARAMETERS
C
      DIMENSION SRVDUP (36, 36, 5)
      DIMENSION SRVPRM (36, 36, 5)
      DIMENSION SRVSTF (36, 2, 5), SRVRAT (36, 3, 5)
      DIMENSION SRVNAM(36, 2, 8), RELNAM(36, 2, 8)
      DIMENSION RELRAT(36,3,5), RELSRV(36,36,5), RELSTF(36,2,5)
      INTEGER SRVSIZ, CATSIZ,RELSIZ
      INTEGER NYEARS
```

```
C
      COMMON /COMFIL/ PRIIN,PRIOU,SECOUT,PRINTR
C    COMMON PARAMETERS
C
      INTEGER PRIIN,PRIOU,SECOUT,PRINTR
      LOGICAL YESNO
      COMMON /COMSTF/ TEACHR, AIDE, AIDTCH
      INTEGER TEACHR, AIDE, AIDTCH
      COMMON /COMW/ FULL,ABBREV
      INTEGER FULL,ABBREV
      COMMON /COMBAS/ BASEYR,NYEARS
C
C     LOCAL VARIABLES
C
      INTEGER  SRV, CAT,REL, J,K, SEP,  SIX
      DATA N /'N'/
      SIX=6
C
      WRITE (PRIOU,100)
  100 FORMAT (/1X,'INFORMATION FOR WORKSHEET 5',/,
     #        1X,'PERSONNEL RATIOS',//1X,
     #       'CURRENT STUDENT/TEACHER',1X,
     #'AND AIDE/TEACHER RATIOS',//,1X,'PROGRAM',31X,'S/T RATIO',
     #3X,'A/T RATIO')
      DO 1000 SRV = 1, SRVSIZ, 1
          TOT = 0
          DO 500 CAT = 1, CATSIZ, 1
              TOT = TOT + SRVPRM(SRV,CAT,1) + SRVDUP(SRV,CAT,1)
  500     CONTINUE
          SRVRAT (SRV, TEACHR, 1) = 0
          IF( SRVSTF(SRV,TEACHR,1) .GT. 0.0 )
     #        SRVRAT (SRV, TEACHR,1) = TOT / SRVSTF(SRV,TEACHR,1)
          SRVRAT (SRV, AIDE, 1) = 0
          IF( SRVSTF(SRV,AIDE,1) .GT. 0.0 )
     #        SRVRAT (SRV, AIDE,1) = TOT / SRVSTF(SRV,AIDE,1)
          SRVRAT(SRV,AIDTCH,1) = 0.0
          IF (SRVRAT(SRV,AIDE,1) .NE. 0.0) SRVRAT(SRV,AIDTCH,1)=
     #        SRVRAT(SRV,TEACHR,1) / SRVRAT(SRV,AIDE,1)
          WRITE (PRIOU,110)(SRVNAM(SRV,FULL,J),J=1,8,1),
     #            SRVRAT(SRV,TEACHR,1),SRVRAT(SRV,AIDTCH,1)
  110     FORMAT (/1X,8A4,F9.0,' : 1',1X,F8.2,' : 1')
 1000 CONTINUE
      DO 2000 REL = 1, RELSIZ, 1
          TOT = 0
          DO 1500 CAT = 1, CATSIZ, 1
              TOT = TOT + RELSRV(REL,CAT,1)
 1500     CONTINUE
          RELRAT (REL, TEACHR, 1) = 0
          IF( RELSTF(REL,TEACHR,1) .GT. 0.0 )
     #        RELRAT (REL, TEACHR,1) = TOT / RELSTF(REL,TEACHR,1)
          RELRAT (REL, AIDE, 1) = 0
          IF( RELSTF(REL,AIDE,1) .GT. 0.0 )
     #        RELRAT (REL, AIDE,1) = TOT / RELSTF(REL,AIDE,1)
          RELRAT(REL,AIDTCH,1) = 0.0
          IF (RELRAT(REL,AIDE,1) .NE. 0.0) RELRAT(REL,AIDTCH,1)=
     #        RELRAT(REL,TEACHR,1) / RELRAT(REL,AIDE,1)
          WRITE (PRIOU,1600)(RELNAM(REL,FULL,J),J=1,8,1),
     #            RELRAT(REL,TEACHR,1),RELRAT(REL,AIDTCH,1)
 1600     FORMAT (/1X,8A4,F9.0,' : 1',F9.3,' : 1')
 2000 CONTINUE
```

```
C
C     THE USER MAY WISH TO PAUSE HERE
C
      WRITE(SECOUT,2010)
 2010 FORMAT('NO DELAY')
      WRITE (PRIOU,2050)
 2050 FORMAT (/1X,'WOULD YOU LIKE TO DELAY THE COMPLETION OF THIS'/,
     #        1X,'SESSION TO EXAMINE YOUR OUTPUT (Y OR N) ?')
      IF (.NOT. YESNO(FOO)) GOTO 2095
C     IF WE ARE STILL HERE, PAUSE
      STOP
 2095 WRITE (PRIOU,2200)
 2200 FORMAT (/1X,'WORKSHEET 5',/1X,'PERSONNEL RATIOS',
     #        //1X,'ENTER THE PERSONNEL RATIOS YOU',
     #        1X,'WOULD LIKE TO',/,
     #          1X,'HAVE AT THE END OF THE PLANNING PERIOD')
      DO 3000 SRV = 1, SRVSIZ, 1
      WRITE (PRIOU,2300) (SRVNAM (SRV,FULL,J), J = 1, 8, 1)
 2300 FORMAT (/1X,8A4,/1X,'STUDENT/TEACHER RATIO')
      SRVRAT (SRV,TEACHR,NYEARS) = CPREAL(PRIIN,SECOUT)
      WRITE (PRIOU,2400)
 2400 FORMAT (1X,'AIDE/TEACHER RATIO')
      SRVRAT (SRV, AIDTCH, NYEARS) = CPREAL(PRIIN,SECOUT)
      SRVRAT(SRV,AIDE,NYEARS)=0.0
      IF(SRVRAT(SRV,AIDTCH,NYEARS).GT. 0.0)
     #     SRVRAT(SRV,AIDE,NYEARS)=SRVRAT(SRV,TEACHR,NYEARS) /
     #                             SRVRAT(SRV,AIDTCH,NYEARS)
 3000 CONTINUE
C
      DO 3111 REL = 1, RELSIZ, 1
      WRITE (PRIOU,3311) (RELNAM (REL,FULL,J), J = 1, 8, 1)
 3311 FORMAT (/1X,8A4,/1X,'STUDENT/PROFESSIONAL RATIO')
      RELRAT (REL,TEACHR,NYEARS) = CPREAL(PRIIN,SECOUT)
      WRITE (PRIOU,3411)
 3411 FORMAT (1X,'AIDE/PROFESSIONAL RATIO')
      RELRAT (REL, AIDTCH, NYEARS) = CPREAL(PRIIN,SECOUT)
      RELRAT(REL,AIDE,NYEARS)=0.0
      IF(  RELRAT(REL,AIDTCH,NYEARS) .GT. 0.0 )
     #     RELRAT(REL,AIDE,NYEARS)=RELRAT(REL,TEACHR,NYEARS) /
     #                             RELRAT(REL,AIDTCH,NYEARS)
 3111 CONTINUE
      WRITE(SECOUT,4000)
 4000 FORMAT(1X,'END OF DATA FOR WORKSHEET 5')
      RETURN
      END
C-----
      SUBROUTINE WKSHT6 (DSTNAM, DSTCMP, DSTSUP, DSTSTF, DSTPER,
     #                   COMP, CMPNAM, ASIZ, DSTSIZ, AOFF)
      IMPLICIT REAL (A-Z)
      INTEGER ASIZ,DSTSIZ
C
C     INPUT FROM WORKSHEET SEVEN
C     ALL PARAMETERS ARE ACTUALS EXCEPT ASIZ AND SRVXIZ
C
      DATA XXXX /'XXXX'/
C
      DIMENSION DSTNAM(36,2,8), DSTCMP(36,2)
      DIMENSION COMP(360,2)
      DIMENSION CMPNAM(360,8)
      DIMENSION DSTSUP (36, 5), DSTSTF(36,2,5), DSTPER(36)
```

```
    DIMENSION NAME32(8)
    INTEGER DSTCMP
C
    COMMON /COMFIL/ PRIIN,PRIOU,SECOUT,PRINTR
    INTEGER PRIIN,PRIOU,SECOUT,PRINTR
    COMMON /COMPOS/ FIRST,LAST
    INTEGER FIRST,LAST
    COMMON /COMINF/ INFQAN,INFCST
    INTEGER INFQAN,INFCST
    COMMON /COMM/ FULL,ABBREV
    INTEGER FULL,ABBREV
    COMMON /COMSTF/ TEACHR, AIDE, AIDTCH
    INTEGER TEACHR, AIDE, AIDTCH
    COMMON /COMBAS/ BASEYR,NYEARS
    INTEGER BASEYR,NYEARS
C
    INTEGER J,AOFF,YEAR,SEP,CMP,DST,CAT,CURYR,CURYR1,ONE,INFO
C
    ONE=1
    WRITE (PRIOU,20)
  20 FORMAT (/1X,'WORKSHEET 6',/,1X,'DISTRICT SUPPORT SERVICES',//
   #          1X,'ENTER INFORMATION ABOUT THE RESOURCES ',
   #          1X,'ALLOCATED TO DISTRICT SUPPORT SERVICES:')
    DSTSIZ = 1
    DSTCMP (DSTSIZ, FIRST) = 0
    DSTCMP (DSTSIZ, LAST) = 0
    DSTSTF (DSTSIZ, TEACHR,1)= 0
    DSTSTF (DSTSIZ, AIDE,1)= 0
  30  WRITE (PRIOU,50)
  50   FORMAT (/1X,'ENTER THE SERVICE NAME',/,
   # 1X,'(ENTER XXXX WHEN WHEN ALL SERVICES HAVE BEEN ENTERED)',/)
      CALL CSTRNG(NAME32,PRIIN,SECOUT)
       DO 100 J=1,8,1
        DSTNAM(DSTSIZ,FULL,J)=NAME32(J)
 100    CONTINUE
      IF (DSTNAM(DSTSIZ, FULL, 1) .EQ. XXXX) GOTO 2000
      DSTCMP (DSTSIZ, FIRST) = 0
C     RESOURCE COMPONENT LOOP
 105      WRITE (PRIOU,110)
 110     FORMAT (/1X,'ENTER THE TYPE OF THE RESOURCE',/,
   #  1X,'(ENTER XXXX WHEN ALL RESOURCES FOR THIS',
   #  1X,'SERVICE HAVE BEEN ENTERED')
         CALL CSTRNG(NAME32,PRIIN,SECOUT)
          DO 120 J=1,8,1
           CMPNAM(AOFF,J)=NAME32(J)
 120       CONTINUE
         IF (CMPNAM(AOFF,1) .EQ. XXXX) GOTO 800
         IF (DSTCMP(DSTSIZ,FIRST) .EQ. 0)
   #              DSTCMP(DSTSIZ,FIRST) = AOFF
         DSTCMP (DSTSIZ,LAST) = AOFF
         WRITE (PRIOU,130)
 130     FORMAT (1X,'ENTER THE PRICE OF ONE')
         COMP (AOFF, INFCST) = CPREAL (PRIIN,SECOUT)
         COMP (AOFF, INFQAN) = 1.0
         AOFF = AOFF + 1
      GOTO 105
 800  WRITE (PRIOU,810)
 810  FORMAT (/1X,'ENTER SERVICE LEVELS',
   #  1X,'FOR EACH YEAR')
      DO 900 YEAR = 1,NYEARS,1
```

```
               CURYR = BASEYR + YEAR - 1
               CURYR1 = CURYR + 1 - 1900
           WRITE (PRIOU,410) CURYR, CURYR1
  410      FORMAT (/1X,I4,'-',I2)
               DSTSUP (DSTSIZ, YEAR) = CPREAL(PRIIN,SECOUT)
  900      CONTINUE
       WRITE (PRIOU,950)
  950  FORMAT (1X,'ENTER THE NUMBER OF STAFF PEOPLE')
       DSTPER(DSTSIZ) = CPREAL (PRIIN,SECOUT)
 1000      CONTINUE
           DSTSIZ = DSTSIZ + 1
       GOTO 30
 2000  CONTINUE
       IF (DSTSIZ.GT.1) DSTSIZ=DSTSIZ-1
       WRITE(SECOUT,3000)
 3000  FORMAT(1X,'END OF DATA FOR WORKSHEET 6')
       RETURN
       END
C------
       SUBROUTINE CALC(TOTSPC,CATUDP,SRVPRM,SRVDUP,RELSRV,SRVSIZ,
     #                RELSIZ,CATSIZ,SRVCST,RELCST,DSTCST,DSTPER,
     #               DSTSIZ,SRVCMP,RELCMP,DSTCMP,COMP,INFLTN,
     #               SRVSTF,RELSTF,SRVRAT,RELRAT,DSTSUP,DSTSTF)
        IMPLICIT REAL(A-Z)
C
C      CALCULATES TOTALS ACROSS CATEGORIES, AND SERVICES.
C      CATSIZ+1 = ALL CATEGORIES
C      SRVSIZ+1 = ALL SERVICES
C      RELSIZ+1 = ALL RELATED SERVICES
C
C
C      PARAMETERS
C
       INTEGER SRVSIZ,RELSIZ,CATSIZ,DSTSIZ
       DIMENSION TOTSPC(5),CATUDP(36,5),SRVPRM(36,36,5)
       DIMENSION SRVDUP(36,36,5),RELSPV(36,36,5)
       DIMENSION SRVCST(36,2,5), RELCST(36,2,5), DSTCST(36,2,5)
       DIMENSION SRVCMP(36,2),RELCMP(36,2),DSTCMP(36,2),COMP(360,2)
       DIMENSION DSTPER(36)
       DIMENSION INFLTN(5)
       DIMENSION SRVSTF(36,2,5), RELSTF(36,2,5)
       DIMENSION SRVRAT(36,3,5), RELRAT(36,3,5)
       DIMENSION DSTSUP(36,5), DSTSTF(36,2,5)
       INTEGER SRVCMP,PELCMP,DSTCMP
C
C      COMMON VARIABLES
C
       COMMON /COMBAS/ BASEYR,NYEARS
       INTEGER BASEYR,NYEARS
       COMMON /COMPOS/ FIRST,LAST
       INTEGER FIRST,LAST
       COMMON /COMINF/ INFQAN,INFCST
       INTEGER INFQAN,INFCST
       COMMON /COMSTF/ TEACHR, AIDE, AIDTCH
       INTEGER TEACHR, AIDE, AIDTCH
       COMMON/COMCST/ CURDOL,ACTUAL
       INTEGER CURDOL,ACTUAL
       COMMON /COMIFL/ CUMINF(5)
C
C      LOCAL VARIABLES
```

```
C
      INTEGER CAT,SRV,REL,DST,STF,YR,STEPS
      INTEGER BEGPOS,ENDPOS,POS
C
C     TOTAL SERVICE LEVELS AND INFLATION INDEX
C
      CUMINF(1)=1
      DO 1000 YR=1,NYEARS,1
C        CALCULATE INFLATION MULTIPLIER
C
         IF(YR.NE.1) CUMINF(YR)=
     #     CUMINF(YR-1) * ((100.0 + INFLTN(YR-1)) / 100.0)
C
C        ACROSS CATEGORIES TOTAL STUDENTS AND SERVICES
C
         TOTSPC(YR) = 0
         DO 100 CAT=1,CATSIZ,1
C
C           TOTAL STUDENTS
C
            TOTSPC(YR)=TOTSPC(YR) + CATUDP(CAT,YR)
C
C
C           TOTAL ALL SERVICES IN SRVPRM AND SRVDUP
C
            SRVTOT=0
            SRVT2=0
            DO 15 SRV=1,SRVSIZ,1
               SRVTOT=SRVPRM(SRV,CAT,YR) + SRVTOT
               SRVT2=SRVDUP(SRV,CAT,YR) + SRVT2
 15            CONTINUE
            SRVPRM(SRVSIZ+1,CAT,YR) = SRVTOT
            SRVDUP(SRVSIZ+1,CAT,YR) = SRVT2
C
C           TOTAL ALL SERVICES IN RELSRV
C
            RELTOT=0
            DO 20 REL=1,RELSIZ,1
               RELTOT=RELSRV(REL,CAT,YR) + RELTOT
 20            CONTINUE
            RELSRV(RELSIZ+1,CAT,YR) = RELTOT
 100        CONTINUE
C
C        ACROSS SERVICES TOTAL CATEGORIES
C
         DO 150 SRV=1,SRVSIZ,1
            CATTOT=0
            CATT2=0
            DO 125 CAT=1,CATSIZ,1
               CATTOT=SRVPRM(SRV,CAT,YR) + CATTOT
               CATT2=SRVDUP(SRV,CAT,YR) + CATT2
 125           CONTINUE
         SRVPRM(SRV,CATSIZ+1,YR) = CATTOT
         SRVDUP(SRV,CATSIZ+1,YR) = CATT2
 150        CONTINUE
C
C        ACROSS RELATED SERVICES TOTAL CATEGORIES
C
         DO 175 REL=1,RELSIZ,1
            CATTOT=0
            DO 160 CAT=1,CATSIZ,1
               CATTOT=CATTOT + RELSRV(REL,CAT,YR)
 160           CONTINUE
            RELSRV(REL,CATSIZ+1,YR) = CATTOT
 175        CONTINUE
C
C         ACROSS TOTALED  SERVICES TOTAL CATEGORIES
C
          CATT1=0
          CATT2=0
          CATT3=0
          DO 190 CAT=1,CATSIZ,1
             CATT1=CATT1 + SRVPRM(SRVSIZ+1,CAT,YR)
             CATT2=CATT2 + SRVDUP(SRVSIZ+1,CAT,YR)
             CATT3=CATT3 + RELSRV(RELSIZ+1,CAT,YR)
 190         CONTINUE
          SRVPRM(SRVSIZ+1,CATSIZ+1,YR)=CATT1
          SRVDUP(SRVSIZ+1,CATSIZ+1,YR)=CATT2
          RELSRV(RELSIZ+1,CATSIZ+1,YR)=CATT3
1000    CONTINUE
C
C       INTERPOLATE STUDENT/TEACHER RATIOS
C
        IF (NYEARS.LE.2) GOTO 90
        DO 40 SRV=1,SRVSIZ,1
C       USE "BIG M" TO HANDLE ZERO TO NON-ZERO RATIOS
C       THIS IS NECEASSARY BECAUSE WE ARE INTERPOLATING RATIOS
        SAVE = SRVRAT(SRV,TEACHR,1)
        IF (SRVRAT(SRV,TEACHR,1) .EQ. 0.0 .AND. SRVRAT(SRV,TEACHR,NYEARS)
     #    .NE. 0.0) SRVRAT(SRV,TEACHR,1) =
     #         NYEARS * SRVRAT(SRV,TEACHR,NYEARS)
C       THE YEAR ONE VALUE MUST BE PATCHED BACK IN BELOW
           STEPS=NYEARS-1
           GAP=SRVRAT(SRV,TEACHR,NYEARS) - SRVRAT(SRV,TEACHR,1)
           STFBAS=SRVRAT(SRV,TEACHR,1)
           YRDIFF=GAP/STEPS
           DO 30 YR=2,STEPS,1
              SRVRAT(SRV,TEACHR,YR) = STFBAS + (YR-1) * YRDIFF
              SRVSTF(SRV,TEACHR,YR)=0
              IF (SRVRAT(SRV,TEACHR,YR) .NE. 0)
     #        SRVSTF(SRV,TEACHR,YR) =
     #            (SRVPRM(SRV,CATSIZ+1,YR) + SRVDUP(SRV,CATSIZ+1,YR))
     #          / SRVRAT(SRV,TEACHR,YR)
  30          CONTINUE
           SRVRAT(SRV,TEACHR,1) = SAVE
  40       CONTINUE
C
C       INTERPOLATE AIDE/TEACHER RATIOS
C
        DO 50 SRV=1,SRVSIZ,1
C       USE "BIG M" TO HANDLE ZERO TO NON-ZERO RATIOS
C       THIS IS NECESSARY BECAUSE WE ARE INTERPOLATING RATIOS
        SAVE = SRVRAT(SRV,AIDTCH,1)
        IF (SRVRAT(SRV,AIDTCH,1) .EQ. 0.0 .AND. SRVRAT(SRV,AIDTCH,NYEARS)
     #    .NE. 0.0) SRVRAT(SRV,AIDTCH,1) =
     #         NYEARS * SRVRAT(SRV,AIDTCH,NYEARS)
C       THE YEAR ONE VALUE MUST BE PATCHED BACK IN BELOW
           STEPS = NYEARS-1
           GAP = SRVRAT(SRV,AIDTCH,NYEARS) - SRVRAT(SRV,AIDTCH,1)
           STFBAS = SRVRAT(SRV,AIDTCH,1)
```

```
            YRDIFF=GAP/STEPS
            DO 35 YR=2,STEPS,1
               SRVRAT(SRV,AIDTCH,YR) = STFBAS + (YR-1) * YRDIFF
               SRVSTF(SRV,AIDE,YR) =
     #         SRVRAT(SRV,AIDTCH,YR) * SRVSTF(SRV,TEACHR,YR)
   35          CONTINUE
            SRVRAT(SRV,AIDTCH,1) = SAVE
   50       CONTINUE
C
C     INTERPOLATE STUDENT/PROFESSIONAL RATIOS
C
      DO 70 REL=1,RELSIZ,1
C     USE "BIG M" TO HANDLE ZERO TO NON-ZERO RATIOS
C     THIS IS NECESSARY BECAUSE WE ARE INTERPOLATING RATIOS
      SAVE = RELRAT(REL,TEACHR,1)
      IF (RELRAT(REL,TEACHR,1) .EQ. 0.0 .AND. RELRAT(REL,TEACHR,NYEARS)
     #    .NE. 0.0) RELRAT(REL,TEACHR,1) =
     #          NYEARS * RELRAT(REL,TEACHR,NYEARS)
C     THE YEAR ONE VALUE MUST BE PATCHED BACK IN BELOW
            STEPS=NYEARS-1
            GAP=RELRAT(REL,TEACHR,NYEARS) - RELRAT(REL,TEACHR,1)
            STFBAS=RELRAT(REL,TEACHR,1)
            YRDIFF=GAP/STEPS
            DO 60 YR=2,STEPS,1
               RELRAT(REL,TEACHR,YR) = STFBAS + (YR-1) * YRDIFF
               RELSTF(REL,TEACHR,YR)=0
               IF (RELRAT(REL,TEACHR,YR) .NE. 0)
     #         RELSTF(REL,TEACHR,YR) =
     #                     RELSRV(REL,CATSIZ+1,YR) / RELRAT(REL,TEACHR,YR)
   60          CONTINUE
            RELRAT(REL,TEACHR,1) = SAVE
   70       CONTINUE
C
C     INTERPOLATE AIDE/PROFESSIONAL RATIOS
C
      DO 80 REL=1,RELSIZ,1
C     USE "BIG M" TO HANDLE ZERO TO NON-ZERO RATIOS
C     THIS IS NECESSARY BECAUSE WE ARE INTERPOLATING RATIOS
      SAVE = RELRAT(REL,AIDTCH,1)
      IF (RELRAT(REL,AIDTCH,1) .EQ. 0.0 .AND. RELRAT(REL,AIDTCH,NYEARS)
     #    .NE. 0.0) RELRAT(REL,AIDTCH,1) =
     #          NYEARS * RELRAT(REL,AIDTCH,NYEARS)
C     THE YEAR ONE VALUE MUST BE PATCHED BACK IN BELOW
            STEPS = NYEARS-1
            GAP=RELRAT(REL,AIDTCH,NYEARS) - RELRAT(REL,AIDTCH,1)
            STFBAS=RELRAT(REL,AIDTCH,1)
            YRDIFF=GAP/STEPS
            DO 65 YR=2,STEPS,1
               RELRAT(REL,AIDTCH,YR) = STFBAS + (YR-1) * YRDIFF
              RELSTF(REL,AIDE,YR) =
     #            RELRAT(SRV,AIDTCH,YR) * RELSTF(SRV,TEACHR,YR)
   65          CONTINUE
            RELRAT(REL,AIDTCH,1) = SAVE
   80       CONTINUE
C
C     CALCULATE FINAL STAFF LEVELS
C
   90 CONTINUE
         DO 92 SRV=1,SRVSIZ,1
            SRVSTF(SRV,TEACHR,NYEARS)=0
            IF (SRVRAT(SRV,TEACHR,NYEARS) .NE. 0)
     #      SRVSTF(SRV,TEACHR,NYEARS) =
     #       (SRVPRM(SRV,CATSIZ+1,NYEARS) +
     #        SRVDUP(SRV,CATSIZ+1,NYEARS))
     #       /  SRVRAT(SRV,TEACHR,NYEARS)
   92       CONTINUE
         DO 94 REL=1,RELSIZ,1
             RELSTF(REL,TEACHR,NYEARS)=0.0
             IF(RELRAT(REL,TEACHR,NYEARS).NE.0)
     #      RELSTF(REL,TEACHR,NYEARS) =
     #        RELSRV(REL,CATSIZ+1,NYEARS)  / RELRAT(REL,TEACHR,NYEARS)
   94       CONTINUE
         DO 96 SRV=1,SRVSIZ,1
            SRVSTF(SRV,AIDE,NYEARS)=0
            IF (SRVRAT(SRV,AIDTCH,NYEARS) .NE. 0)
     #      SRVSTF(SRV,AIDE,NYEARS) =
     #        SRVSTF(SRV,TEACHR,NYEARS) *
     #        SRVRAT(SRV,AIDTCH,NYEARS)
   96       CONTINUE
         DO 98 REL=1,RELSIZ,1
             RELSTF(REL,AIDE,NYEARS)=0.0
            RELSTF(REL,AIDE,NYEARS) =
     #        RELSTF(REL,TEACHR,NYEARS) *
     #        RELRAT(REL,AIDTCH,NYEARS)
   98       CONTINUE
C
C     CALCULATE DISTRICT STAFF LEVELS
C
      DO 2000 YR = 1, NYEARS, 1
          DO 1900 DST = 1, DSTSIZ, 1
          DSTSTF(DST,1,YR) = DSTPER(DST) * DSTSUP(DST,YR)
 1900     CONTINUE
 2000 CONTINUE
C
C     CALCULATE TOTAL STAFF LEVELS
C
      DO 3400 YR=1,NYEARS,1
         DO 3300 STF=TEACHR, AIDE, 1
            TOTSTF=0
            DO 3100 SRV=1,SRVSIZ,1
               TOTSTF = TOTSTF + SRVSTF(SRV,STF,YR)
 3100          CONTINUE
            SRVSTF(SRVSIZ+1,STF,YR) = TOTSTF
            TOTSTF=0
            DO 3200 REL=1,RELSIZ,1
               TOTSTF = TOTSTF + RELSTF(REL,STF,YR)
 3200          CONTINUE
            RELSTF(RELSIZ+1,STF,YR) = TOTSTF
 3300       CONTINUE
 3400     CONTINUE
C
C        TOTAL COSTS ACROSS SERVICES
C
        DO 6000 YR=1,NYEARS,1
         DO 275 SRV=1,SRVSIZ,1
            SRVTOT=0
            BEGPOS=SRVCMP(SRV,FIRST)
            ENDPOS=SRVCMP(SRV,LAST)
            DO 250 POS=BEGPOS,ENDPOS,1
               QUAID=COMP(POS,INFQAN)
            IF((POS.EQ.BEGPOS+1).AND.
     #      (SRVRAT(SRV,TEACHR,YR).NE.0).AND.
     #      (SRVRAT(SRV,AIDE,YR).NE.0))
     #       QUAID=(SRVRAT(SRV,TEACHR,YR)/SRVRAT(SRV,AIDE,YR))
     #       * COMP(BEGPOS,INFQAN)
            SRVTOT=SRVTOT + QUAID * COMP(POS,INFCST)
 250        CONTINUE
         SRVCST(SRV,CURDOL,YR)=SRVTOT
         SRVCST(SRV,ACTUAL,YR)=SRVTOT*CUMINF(YR)
 275     CONTINUE
C
C     TOTAL COSTS ACROSS RELATED SERVICES
C
      DO 375 REL=1,RELSIZ,1
         RELTOT=0
         BEGPOS=RELCMP(REL,FIRST)
         ENDPOS=RELCMP(REL,LAST)
         DO 350 POS=BEGPOS,ENDPOS,1
            QUAID=COMP(POS,INFQAN)
            IF((POS.EQ.BEGPOS+1).AND.
     #      (RELRAT(REL,TEACHR,YR).NE.0).AND.
     #      (RELRAT(REL,AIDE,YR).NE.0))
     #       QUAID=(RELRAT(REL,TEACHR,YR)/RELRAT(REL,AIDE,YR))
     #       * COMP(BEGPOS,INFQAN)
            RELTOT=RELTOT + QUAID * COMP(POS,INFCST)
 350        CONTINUE
         RELCST(REL,CURDOL,YR)=RELTOT
         RELCST(REL,ACTUAL,YR)=RELTOT*CUMINF(YR)
 375     CONTINUE
C
C     TOTAL COSTS ACROSS DISTRICT SERVICES
C
      DO 475 DST=1,DSTSIZ,1
         DSTTOT=0
         BEGPOS=DSTCMP(DST,FIRST)
         ENDPOS=DSTCMP(DST,LAST)
         DO 450 POS=BEGPOS,ENDPOS,1
            DSTTOT=DSTTOT + COMP(POS,INFQAN) * COMP(POS,INFCST)
 450        CONTINUE
         DSTCST(DST,CURDOL,YR)=DSTTOT
         DSTCST(DST,ACTUAL,YR)=DSTTOT*CUMINF(YR)
 475     CONTINUE
6000   CONTINUE
      RETURN
      END
C------
      SUBROUTINE OUT1 (TOTROL, TOTSPC, INFLTN)
      IMPLICIT REAL (A-Z)
C     OUTPUT ONE
C     THE YEARS ARRAY IS LOADED HERE AND PASSED IN COMMON TO OTHER
C     OUTPUT ROUTINES.  THE YEARS WRITE AND FORMAT STATEMENT IS T
C     TYPICAL.
C
      DIMENSION TOTROL(5), TOTSPC(5), INFLTN(5)
      INTEGER YR,J
      COMMON /COMBAS/ BASEYR,NYEARS
      INTEGER BASEYR,NYEARS
      COMMON /COMYR/ YEARS (6)
      INTEGER YEARS
      COMMON /COMFIL/ PRIIN,PRIOU,SECOUT,PRINTR
      INTEGER PRIIN,PRIOU,SECOUT,PRINTR
      COMMON /COMTXT/ WHERE(8), WHO(8), WHAT(8), PAGE
      COMMON /COMIFL/ CUMINF(5)
      INTEGER PAGE
      DIMENSION OUTINF(5)
      INTEGER TYR
C
C     LOAD YEARS
C
      YEARS(1) = BASEYR - 1900
      DO 50 YR = 1,NYEARS,1
          YEARS(YR+1) = BASEYR + YR - 1900
   50 CONTINUE
      WRITE(PRINTR,17)(WHERE(J),J=1,8),(WHO(J),J=1,8,1),
     #      (WHAT(J),J=1,8),PAGE
   17 FORMAT (1H1,79X,8A4,/,80X,8A4,/,80X,8A4,/,80X,'PAGE',I3)
      PAGE = PAGE + 1
      WRITE (PRINTR,100)
  100 FORMAT (/,40X,'REPORT 1',/36X,'DISTRICT INFORMATION',//)
      WRITE (PRINTR,200) (YEARS(YR),YEARS(YR+1),YR=1,NYEARS,1)
  200 FORMAT (/1X,32X,5(3X,'19',I2,'-',I2))
      WRITE (PRINTR,300) (TOTROL(YR),YR=1,NYEARS,1)
  300 FORMAT (/1X,'TOTAL STUDENT POPULATION',8X,5F10.0)
      WRITE (PRINTR,400) (INFLTN(YR),YR=1,NYEARS,1)
  400 FORMAT (/1X,'INFLATION RATE',18X,5(F9.1,'%'))
      DO 60 TYR = 1, NYEARS, 1
        OUTINF(TYR) = CUMINF(TYR) * 100.0 - 100.0
 60     CONTINUE
      WRITE (PRINTR,500) (OUTINF(YR),YR = 1, NYEARS, 1)
  500 FORMAT (/1X,'CUMULATIVE INFLATION',12X,5(F9.1,'%'))
      RETURN
      END
C-----
C
      SUBROUTINE OUT2(CATUDP,CATNAM,TOTROL,TOTSPC,CATSIZ)
      IMPLICIT REAL(A-Z)
C     OUTPUT TWO
C     ENDPRV HAS THE PREVALENCE RATE FOR THE LAST YEAR
C
      DIMENSION CATUDP(36,5), CATNAM(36,2,8)
      DIMENSION TOTSPC(5), TOTROL(5)
      COMMON /COMW/ FULL,ABBREV
      INTEGER FULL,ABBREV
      COMMON /COMYR/ YEARS (6)
      INTEGER YEARS
      COMMON /COMBAS/ BASEYR,NYEARS
      INTEGER BASEYR,NYEARS
      COMMON /COMFIL/ PRIIN,PRIOU,SECOUT,PRINTR
      INTEGER PRIIN,PRIOU,SECOUT,PRINTR
      INTEGER YEAR, CURYR, CURYR1, SEP
      COMMON /COMTXT/ WHERE(8), WHO(8), WHAT(8), PAGE
      INTEGER PAGE
C
      INTEGER YR, CAT, CATSIZ,J
C
C
C     NOW DO THE OUPTUT
C
      WRITE(PRINTR,17)(WHERE(J),J=1,8),
     #          (WHO(J),J=1,8,1),(WHAT(J),J=1,8),PAGE
   17 FORMAT (1H1,79X,8A4,/,80X,8A4,/,80X,8A4,/,80X,'PAGE',I3)
      PAGE = PAGE + 1
      WRITE (PRINTR,100)
  100 FORMAT (/,40X,'REPORT 2',/,31X,'NUMBER OF STUDENTS',
     #        1X,'BY CATEGORY',/,35X,'(UNDUPLICATED COUNT)')
      WRITE (PRINTR,210) (YEARS(YR),YEARS(YR+1),YR=1,NYEARS,1)
  210 FORMAT (/1X,40X,'PREVALENCE',/36X,'CURRENT     FINAL',
     #        5(3X,'19',I2,'-',I2),/)
      DO 1000 CAT = 1, CATSIZ, 1
          ENDPRV = (CATUDP (CAT,NYEARS) / TOTROL(NYEARS)) * 100.0
          BEGPRV = (CATUDP (CAT,1) / TOTROL(1)) * 100.0
          WRITE (PRINTR,300) (CATNAM(CAT,FULL,J),J=1,8,1),
     #  BEGPRV,ENDPRV,(CATUDP(CAT,YR),YR=1,NYEARS,1)
  300     FORMAT (/1X,8A4,2(F9.3,'%'),5F10.0)
 1000 CONTINUE
      ENDPRV = TOTSPC(NYEARS) / TOTROL(NYEARS) * 100.0
      BEGPRV = TOTSPC(1) / TOTROL(1) * 100.0
      WRITE (PRINTR,400) BEGPRV,ENDPRV,(TOTSPC(YR), YR = 1,NYEARS,1)
  400 FORMAT (/1X,'TOTALS',26X,2(F9.3,'%'),5F10.0)
C
      RETURN
      END
C------
      SUBROUTINE OUT3 (SRVDUP, SRVPRM, RELSRV, SRVSIZ, RELSIZ
     #                ,CATSIZ,RELNAM,SRVNAM)
      IMPLICIT REAL (A-Z)
C
C     PARAMETERS
C
      DIMENSION SRVDUP(36,36,5),SRVPRM(36,36,5),RELSRV(36,36,5)
      DIMENSION RELNAM(36,2,8), SRVNAM(36,2,8)
      INTEGER SRVSIZ,RELSIZ,CATSIZ
      INTEGER SRV,REL,YR,J
C
C     PARAMETERS  FROM COMMON
C
      COMMON /COMM/ FULL,ABBREV
      INTEGER FULL,ABBREV
      COMMON /COMYR/ YEARS (6)
      INTEGER YEARS
      COMMON /COMFIL/ PRIIN,PRIOU,SECOUT,PRINTR
      INTEGER PRIIN,PRIOU,SECOUT,PRINTR
      COMMON /COMBAS/ BASEYR,NYEARS
      INTEGER BASEYR,NYEARS
      COMMON /COMTOT/ TOTROL,TOTSPC
      DIMENSION TOTROL(5), TOTSPC(5)
      DIMENSION SRVROL(5)
      COMMON /COMTXT/ WHERE(8), WHO(8), WHAT(8), PAGE
      INTEGER PAGE
C
      WRITE(PRINTR,17)(WHERE(J),J=1,8),
     #           (WHO(J),J=1,8,1),(WHAT(J),J=1,8),PAGE
   17 FORMAT (1H1,79X,8A4,/,80X,8A4,/,80X,8A4,/,80X,'PAGE',I3)
      PAGE = PAGE + 1
      WRITE (PRINTR,10)
   10 FORMAT (/,40X,'REPORT 3',//,31X,'NUMBER OF STUDENTS',
     #        1X,'BY PROGRAM AND SERVICE',/,35X,'(DUPLICATED COUNT)')
      WRITE (PRINTR,20)
   20 FORMAT (//1X,'TYPE OF PROGRAM OR SERVICE',
     #        5X,'% OF STUDENTS (FINAL YEAR)')
```

```
      WRITE (PRINTR,30) (YEARS(YR),YEARS(YR+1),YR=1,NYEARS,1)
   30 FORMAT (34X,' SPEC. ED  DISTRICT',5(3X,'19',I2,'-',I2))
C
      WRITE (PRINTR,40)
   40 FORMAT (/1X,'INSTRUCTIONAL PROGRAMS')
      DO 100 SRV = 1, SRVSIZ, 1
C
C          LOAD SRVROL
C
           DO 45 YR = 1, NYEARS, 1
               SRVROL(YR) = SRVPRM(SRV,CATSIZ+1,YR) +
     #                      SRVDUP(SRV,CATSIZ+1,YR)
   45      CONTINUE
C
          DIST1 = (SRVROL(NYEARS)/TOTSPC(NYEARS)) * 100
          DIST2 = (SRVROL(NYEARS)/TOTROL(NYEARS)) * 100
          WRITE (PRINTR,50) (SRVNAM(SRV,FULL,J), J = 1, 8, 1),
     #                 DIST1,DIST2,
     #                 (SRVROL(YR),YR=1,NYEARS,1)
   50     FORMAT (/1X,8A4,2(F9.3,'%'),5F10.0)
  100 CONTINUE
C
C     RE-LOAD SRVROL
C
           DO 48 YR = 1, NYEARS, 1
               SRVROL(YR) = SRVPRM(SRVSIZ+1,CATSIZ+1,YR) +
     #                      SRVDUP(SRVSIZ+1,CATSIZ+1,YR)
   48      CONTINUE
          DIST1 = (SRVROL(NYEARS)/TOTSPC(NYEARS)) * 100
          DIST2 = (SRVROL(NYEARS)/TOTROL(NYEARS)) * 100
      WRITE (PRINTR,200) DIST1,DIST2,(SRVROL(YR),YR=1, NYEARS, 1)
  200 FORMAT (//1X,'TOTAL DUPLICATED COUNT FOR PGMS ',
     #          2(F9.3,'%'),5F10.0)
C
      WRITE (PRINTR,300)
  300 FORMAT (//1X,'RELATED SERVICES')
      DO 111 REL = 1, RELSIZ, 1
          DIST1=(RELSRV(REL,CATSIZ+1,NYEARS)/TOTSPC(NYEARS))*100.0
          DIST2=(RELSRV(REL,CATSIZ+1,NYEARS)/TOTROL(NYEARS))*100.0
          WRITE (PRINTR,51) (RELNAM(REL,FULL,J), J = 1, 8, 1),
     #                 DIST1,DIST2,
     #                 (RELSRV(REL,CATSIZ+1,YR),YR=1,NYEARS,1)
   51     FORMAT (/1X,8A4,2(F9.3,'%'),5F10.0)
  111 CONTINUE
      DIST1=(RELSRV(RELSIZ+1,CATSIZ+1,NYEARS)/TOTSPC(NYEARS))*100.0
      DIST2=(RELSRV(RELSIZ+1,CATSIZ+1,NYEARS)/TOTROL(NYEARS))*100.0
      WRITE(PRINTR,311) DIST1,DIST2,(RELSRV(RELSIZ+1,CATSIZ+1,YR),
     #    YR=1,NYEARS,1)
 311   FORMAT(//1X,'TOTAL RELATED SERVICES COUNT',4X,2(F9.3,'%'),5F10.0)
      RETURN
      END
C
C-----
      SUBROUTINE OUT4(CATUDP,SRVPRM,SRVDUP,RELSRV,
     #           CATSIZ,SRVSIZ,RELSIZ,CATNAM,SRVNAM,RELNAM)
      IMPLICIT REAL (A-Z)
C
C     PARAMETERS
C
      DIMENSION CATUDP(36,5)
      DIMENSION SRVDUP(36,36,5), SRVPRM(36,36,5), RELSRV(36,36,5)
      DIMENSION CATNAM(36,2,8), SRVNAM(36,2,8), RELNAM(36,2,8)
      INTEGER CATSIZ,SRVSIZ,RELSIZ
      INTEGER CAT,SRV,REL,YR,J
C
C     PARAMETERS  FROM COMMON
C
      COMMON /COMTXT/ WHERE(8), WHO(8), WHAT(8), PAGE
      INTEGER PAGE
      COMMON /COMW/ FULL,ABBREV
      INTEGER FULL,ABBREV
      COMMON /COMYR/ YEARS (6)
      INTEGER YEARS
      COMMON /COMFIL/ PRIIN,PRIOU,SECOUT,PRINTR
      INTEGER PRIIN,PRIOU,SECOUT,PRINTR
      COMMON /COMBAS/ BASEYR,NYEARS
      INTEGER BASEYR,NYEARS
      COMMON /CONTOT/ TOTROL,TOTSPC
      DIMENSION TOTROL(5), TOTSPC(5)
C
      DO 1000 CAT = 1, CATSIZ, 1
          PREV1 = (CATUDP(CAT,1)/TOTROL(1)) * 100
          PREV2 = (CATUDP(CAT,NYEARS)/TOTROL(NYEARS)) * 100
      WRITE(PRINTR,17)(WHERE(J),J=1,8),
     #          (WHO(J),J=1,8,1),(WHAT(J),J=1,8),PAGE
   17 FORMAT (1H1,79X,8A4,/,80X,8A4,/,80X,8A4,/,80X,'PAGE',I3)
      PAGE = PAGE + 1
          WRITE (PRINTR,10) (CATNAM(CAT,FULL,J),J=1,8,1),PREV1,PREV2
   10     FORMAT (/,40X,'REPORT 4',/24X,'PROJECTED STUDENT',
     #             1X,'NUMBERS AND PLACEMENTS',
     #    //1X,8A4,5X,'CURRENT PREVALANCE RATE',F5.2,'%',
     #    5X,'FINAL PREVALANCE RATE',F5.2,'%',///,
     #    34X,'PERCENT OF STUDENTS',18X,'STUDENTS')
      WRITE(PRINTR,20)YEARS(1),YEARS(2),
     #       YEARS(NYEARS),YEARS(NYEARS+1),
     #          (YEARS(YR),YEARS(YR+1),YR=1,NYEARS,1)
   20     FORMAT (/33X,7(3X,'19',I2,'-',I2),/)
          WRITE(PRINTR,40)
   40     FORMAT (/1X,'PRIMARY PROGRAM PLACEMENT')
C
          TOTPC1 = 0
          TOTPC2 = 0
          DO 100 SRV = 1, SRVSIZ, 1
              PCT1 = (SRVPRM(SRV,CAT,1) / CATUDP(CAT,1)) * 100
              PCT2 =(SRVPRM(SRV,CAT,NYEARS)/(CATUDP(CAT,NYEARS)))*100
              TOTPC1 = TOTPC1 + PCT1
              TOTPC2 = TOTPC2 + PCT2
              WRITE(PRINTR,50)(SRVNAM(SRV,FULL,J),J=1,8,1),PCT1,PCT2,
     #             (SRVPRM(SRV,CAT,YR),YR=1, NYEARS, 1)
   50         FORMAT(/1X,8A4,2(F9.0,'%'),5F10.0)
  100     CONTINUE
          WRITE (PRINTR,30) TOTPC1,TOTPC2,(CATUDP(CAT,YR),YR=1,NYEARS,1)
   30     FORMAT(/1X,'TOTAL IN CATEGORY (UNDUPLICATED)',
     #         2(F9.0,'%'),5F10.0)
C
          WRITE (PRINTR,160)
  160     FORMAT (//1X,'ADDITIONAL PROGRAM PLACEMENT')
          DO 101 SRV = 1, SRVSIZ, 1
              PCT1 = (SRVDUP(SRV,CAT,1) / CATUDP(CAT,1)) * 100
              PCT2 =(SRVDUP(SRV,CAT,NYEARS)/(CATUDP(CAT,NYEARS)))*100
              TOTPC1 = TOTPC1 + PCT1
              TOTPC2 = TOTPC2 + PCT2
              WRITE(PRINTR,51) (SRVNAM(SRV,FULL,J),J=1,8,1),PCT1,PCT2,
     #             (SRVDUP(SRV,CAT,YR),YR=1, NYEARS, 1)
  51          FORMAT(/1X,8A4,2(F9.0,'%'),5F10.0)
 101      CONTINUE
          WRITE (PRINTR,110) TOTPC1,TOTPC2,(SRVDUP(SRVSIZ+1,CAT,YR),
     #                          YR=1,NYEARS,1)
 110      FORMAT (/1X,'TOTAL DUPLICATED COUNT',10X,2(F9.0,'%'),
     #    5F10.0)
C
          WRITE (PRINTR,120)
 120      FORMAT (//1X,'RELATED SERVICES')
          DO 102 REL = 1, RELSIZ, 1
              PCT1 = (RELSRV(REL,CAT,1) / CATUDP(CAT,1)) * 100
              PCT2 =(RELSRV(REL,CAT,NYEARS)/(CATUDP(CAT,NYEARS)))*100
              TOTPC1 = TOTPC1 + PCT1
              TOTPC2 = TOTPC2 + PCT2
              WRITE(PRINTR,52) (RELNAM(REL,FULL,J),J=1,8,1),PCT1,PCT2,
     #          (RELSRV(REL,CAT,YR),YR=1, NYEARS, 1)
  52          FORMAT(/1X,8A4,2(F9.0,'%'),5F10.0)
 102      CONTINUE
C
 1000 CONTINUE
      RETURN
      END
C------
      SUBROUTINE OUT5(SRVCMP,SRVNAM,SRVCST,SRVSIZ,RELCMP,
     #                RELNAM,RELCST,RELSIZ,COMP,CMPNAM)
      IMPLICIT REAL (A-Z)
C
C     PARAMETERS
C
      DIMENSION SRVNAM(36,2,8), RELNAM(36,2,8), CMPNAM(360,8)
      DIMENSION SRVCMP(36,2),RELCMP(36,2),COMP(360,2)
      DIMENSION SRVCST(36,2,5),RELCST(36,2,5)
      INTEGER SRVSIZ,RELSIZ
      INTEGER RELCMP,SRVCMP
C
C    COMMON VARIABLES
C
      COMMON /COMTXT/ WHERE(8), WHO(8), WHAT(8), PAGE
      INTEGER PAGE
      COMMON /COMFIL/ PRIIN,PRIOU,SECOUT,PRINTR
      INTEGER PRIIN,PRIOU,SECOUT,PRINTR
      COMMON /COMPOS/ FIRST,LAST
      INTEGER FIRST,LAST
      COMMON /COMINF/ INFQAN,INFCST
      INTEGER INFQAN,INFCST
      COMMON/COMCST/ CURDOL,ACTUAL
      INTEGER CURDOL,ACTUAL
      COMMON /COMN/ FULL,ABBREV
      INTEGER FULL,ABBREV
      COMMON /COMBAS/ BASEYR,NYEARS
      INTEGER BASEYR,NYEARS
C
C     LOCAL VARIABLES
C
      INTEGER SRV,REL,CMP,BEGCMP,ENDCMP,J
C
```

```
C     OUTPUT SHEET FIVE
C
      WRITE(PRINTR,17)(WHERE(J),J=1,8),
     #            (WHO(J),J=1,8,1),(WHAT(J),J=1,8),PAGE
   17 FORMAT (1H1,79X,8A4,/,80X,8A4,/,80X,8A4,/,80X,'PAGE',I3)
      PAGE = PAGE + 1
      WRITE (PRINTR, 10)
   10 FORMAT (/,40X,'REPORT 5',//
     #  33X,'PROGRAM AND SERVICE DESCRIPTION',
     #  ///,80X,'CURRENT      FINAL',
     #         /1X,'INSTRUCTIONAL PROGRAMS',10X,5X,'RESOURCES',
     #         29X,6X,'PRICE      ','PRICE',//)
      DO 1000 SRV = 1, SRVSIZ, 1
          BEGCMP = SRVCMP(SRV,FIPST)
          ENDCMP = SRVCMP(SRV,LAST)
          DO 500 CMP = BEGCMP,ENDCMP,1
              WRITE (PRINTR,200) (SRVNAM(SRV,FULL,J),J= 1, 8, 1)
     #        ,(CMPNAM(CMP,J),J=1,8,1),COMP(CMP,INFCST)
  200         FORMAT (/1X,8A4,5X,8A4,1X,5X,F10.0)
  500     CONTINUE
          WRITE(PRINTR,520) SRVCST(SRV,CURDOL,1),
     #                      SRVCST(SRV,ACTUAL,NYEARS)
  520     FORMAT (/1X,'TOTAL',70X,2F10.0,//)
 1000 CONTINUE
C
      WRITE (PRINTR,360)
  360 FORMAT (//1X,'PELATED SERVICES',//)
      DC 2000 REL = 1, RELSIZ, 1
          BFGCMP = RELCMP(REL,FIRST)
          ENDCMP =  RELCMP(REL,LAST)
          DO 1500 CMP = BEGCMP, ENDCMP, 1
              WRITE (PRINTR,1200) (RELNAM(REL,FULL,J),J= 1, 8, 1)
     #        ,(CMPNAM(CMP,J),J = 1, 8, 1)
     #         ,COMP(CMP,INFCST)
 1200          FORMAT (/1X,8A4,5X,8A4,1X,5X,F10.0)
 1500      CONTINUE
          WRITE (PRINTR,1800) RELCST(REL,CURDOL,1),
     #         RELCST(REL,ACTUAL,NYEARS)
 1800      FORMAT (/1X,'TOTAL',70X,2F10.0,//)
 2000  CONTINUE
C
      RETURN
      END
C------
      SUBROUTINE OUT6(SRVNAM,SRVRAT,RELNAM,RELRAT,SRVSIZ,RELSIZ)
      IMPLICIT REAL (A-Z)
C     OUTPUT SIX
C
C     PARAMETERS
C
      DIMENSION SRVNAM(36,2,8), RELNAM(36,2,8)
      DIMENSION SRVRAT(36,3,5), RELRAT(36,3,5)
      INTEGER SRVSIZ,RELSIZ
C
C     COMMON VARIABLES
C
      COMMON /COMTXT/ WHERE(8), WHO(8), WHAT(8), PAGE
      INTEGER PAGE
      COMMON /COMSTF/ TEACHR, AIDE, AIDTCH
      INTEGER TEACHR, AIDE, AIDTCH
      COMMON /COMBAS/ BASEYR,NYEARS
      INTEGER BASEYR,NYEARS
      COMMON /COMFIL/ PRIIN,PRIOU,SECOUT,PRINTR
      INTEGER PRIIN,PRIOU,SECOUT,PRINTR
      COMMON /COMW/ FULL,ABBREV
      INTEGER FULL,ABBREV
C
C     LOCAL VARIABLES
C
      INTEGER SRV,REL,YR,J
      WRITE(PRINTR,7)(WHERE(J),J=1,8),
     #           (WHO(J),J=1,8,1),(WHAT(J),J=1,8),PAGE
    7 FORMAT (1H1,79X,8A4,/,80X,8A4,/,80X,8A4,/,80X,'PAGE',I3)
      PAGE = PAGE + 1
      WRITE (PRINTR,10)
   10 FORMAT(/,40X,'REPORT 6',/,35X,'PERSONNEL RATIOS',//,
     #    1X,39X,'STUDENT/TEACHER RATIO',
     #    10X,'AIDE/TEACHER RATIO',/1X,32X,
     #     2(6X,'CURRENT',9X,'DESIRED'),//,1X,'INSTRUCTIONAL PROGRAMS')
C
      DO 15 SRV=1,SRVSIZ,1
         WRITE(PPINTR,100) (SRVNAM(SRV,FULL,J),J=1,8,1),
     #   SRVRAT(SRV,TEACHR,1),SRVRAT(SRV,TEACHR,NYEARS),
     #   SRVRAT(SRV,AIDTCH,1),SRVRAT(SRV,AIDTCH,NYEARS)
  15     CONTINUE
C
      WRITE(PRINTR,17)
   17 FORMAT(///, 40X,'STUDENT/PROFSNL RATIO',
     #       10X,'AIDE/PROFSNL RATIO',/,33X,
     #       2(6X,'CURRENT',9X,'DESIRED'))
      WRITE (PRINTR,19)
   19 FORMAT (//,1X,'RELATED SERVICES')
      DO 25 REL=1,RELSIZ,1
         WRITE(PRINTR,100) (RELNAM(REL,FULL,J),J=1,8,1),
     #   RELRAT(REL,TEACHR,1),RELRAT(REL,TEACHR,NYEARS),
     #   RELRAT(REL,AIDTCH,1),RELRAT(REL,AIDTCH,NYEARS)
  25     CONTINUE
C
 100  FORMAT(//,1X,8A4,4(F10.2,' : 1'))
      RETURN
      END
C------
      SUBROUTINE OUT7(SRVDUP,SRVPRM,SRVRAT,RELRAT,RELSRV,
     #                CATNAM,CATSIZ,SRVSIZ,RELSIZ)
      IMPLICIT REAL (A-Z)
C
C     PARAMETERS
C
      DIMENSION SRVDUP(36,36,5), SRVPRM(36,36,5), SRVRAT(36,3,5)
      DIMENSION RELSRV(36,36,5), RELRAT(36,3,5), CATNAM(36,2,8)
      INTEGER CATSIZ,SRVSIZ,RELSIZ
C
C     PARAMETERS FROM COMMON
C
      COMMON /CONTXT/ WHERE(8), WHO(8), WHAT(8), PAGE
      INTEGER PAGE
      COMMON /COMBAS/ BASEYR,NYEARS
      INTEGER BASEYR,NYEARS
      COMMON /COMFIL/ PRIIN,PRIOU,SECOUT,PRINTR
      INTEGER PRIIN,PRIOU,SECOUT,PRINTR
      COMMON /COMPOS/ FIRST,LAST
      INTEGER FIRST,LAST
      COMMON /COMINF/ INFQAN,INFCST
      INTEGER INFQAN,INFCST
      COMMON /COMSTF/ TEACHR, AIDE, AIDTCH
      INTEGER TEACHR, AIDE, AIDTCH
      COMMON/CUMCST/ CURDOL,ACTUAL
      INTEGER CURDOL,ACTUAL
      COMMON /COMYR/ YEARS (6)
      INTEGER YEARS
      COMMON /COMM/ FULL,ABBREV
      INTEGER FULL,ABBREV
C
C     LOCAL VARIABLES
C
      INTEGER CAT,SRV,REL,YR,J
      DIMENSION T(5), A(5), TTOT(3,5), ATOT(3,5)
C      T AND A CONTAIN THE ANNUAL TOTAL NUMBER OF TEACHERS
C      AND TTOT AND ATOT CONTAIN RUNNING TOTALS.  THE FIRST
C      DIMENSION OF TTOT AND ATOT IS BEST UNDERSTOOD BY
C      REFERRING TO THE OUTPUT SHEET; THERE ARE THREE TOTALS NEEDED
C
      DO 6 YR = 1, NYEARS, 1
          DO 5 J = 1, 3, 1
           TTOT (J,YR) = 0
           ATOT (J,YR) = 0
    5     CONTINUE
    6 CONTINUE
C
      WRITE(PRINTR,17)(WHERE(J),J=1,8),
     #         (WHO(J),J=1,8,1),(WHAT(J),J=1,8),PAGE
   17 FORMAT (1H1,79X,8A4,/,80X,8A4,/,80X,8A4,/,80X,'PAGE',I3)
      PAGE = PAGE + 1
      WRITE (PRINTR,10)
   10 FORMAT (/,40X,'REPORT 7',/20X,'NUMBER OF',
     #       1X,'PERSONNEL BY CATEGORY')
      WRITE (PRINTR,20) (YEARS(YR),YEARS(YR+1),YR = 1, NYEARS, 1)
   20 FORMAT (//30X,5(3X,'19',I2,'-',I2))
C
      WRITE (PRINTR,50)
   50 FORMAT (//1X,'INSTRUCTIONAL PROGRAMS FOR:')
C
      DO 1000 CAT = 1, CATSIZ, 1
C         GET T AND A
          DO 90 YR = 1, NYEARS, 1
                T(YR) = 0
                A(YR) = 0
             DO 100 SRV = 1, SRVSIZ, 1
                IF (SRVRAT(SRV,TEACHR,YR) .NE. 0)
     #          T(YR)=(SRVPRM(SRV,CAT,YR)+SRVDUP(SRV,CAT,YR)) /
     #              SRVRAT(SRV,TEACHR,YR) + T(YR)
                IF (SRVRAT(SRV,AIDE,YR) .NE. 0)
     #          A(YR)=(SRVPRM(SRV,CAT,YR)+SRVDUP(SRV,CAT,YR)) /
     #             SRVRAT(SRV,AIDE,YR) + A(YR)
  100        CONTINUE
                TTOT (1,YR) = TTOT (1,YR) + T(YR)
                ATOT (1,YR) = ATOT (1,YR) + A(YR)
   90     CONTINUE
          WRITE (PRINTR,200) (CATNAM(CAT,FULL,J),J = 1,8,1)
  200    FORMAT (/1X,8A4)
```

```
         WRITE (PRINTR,300) (T(YR),YR = 1, NYEARS, 1)
  300    FORMAT(8X,'TEACHERS',14X,5F10.0)
         WRITE (PRINTR,400) (A(YR),YR = 1, NYEARS, 1)
  400    FORMAT(8X,'AIDES',17X,5F10.0)
 1000 CONTINUE
C
      WRITE (PRINTR,1100)
 1100 FORMAT (//1X,'TOTAL PROGRAM PERSONNEL')
      WRITE (PRINTR,1200) (TTOT(1,YR),YR = 1, NYEARS, 1)
 1200 FORMAT (8X,'TEACHERS',14X,5F10.0)
      WRITE (PRINTR,1300) (ATOT(1,YR),YR = 1, NYEARS, 1)
 1300 FORMAT (8X,'AIDES',17X,5F10.0)
C
      WRITE (PRINTR,51)
   51 FORMAT (//1X,'RELATED SERVICES FOR:')
C
      DO 1001 CAT = 1, CATSIZ, 1
C        GET T AND A
         DO 101 YR = 1, NYEARS, 1
                T(YR) = 0
                A(YR) = 0
             DO 91 REL = 1, RELSIZ, 1
                IF (RELRAT(REL,TEACHR,YR) .NE. 0)
     #          T(YR)=RELSRV(REL,CAT,YR) /
     #                RELRAT(REL,TEACHR,YR) + T(YR)
                IF (RELRAT(REL,AIDE,YR) .NE. 0)
     #          A(YR)=RELSRV(REL,CAT,YR) /
     #                RELRAT(REL,AIDE,YR)  + A(YR)
   91        CONTINUE
              TTOT (2,YR) = TTOT (2,YR) + T(YR)
              ATOT (2,YR) = ATOT (2,YR) + A(YR)
  101    CONTINUE
C
         WRITE (PRINTR,201) (CATNAM(CAT,FULL,J),J = 1,8,1)
  201   FORMAT (/1X,8A4)
         WRITE (PRINTR,301) (T(YR),YR = 1, NYEARS, 1)
  301    FORMAT(8X,'PROFESSIONALS',9X,5F10.0)
         WRITE (PRIETR,302) (A(YR),YR = 1, NYEARS, 1)
  302    FORMAT(8X,'AIDES',17X,5F10.0)
 1001 CONTINUE
C
      WRITE (PRINTR,1108)
 1108 FORMAT (//1X,'TOTAL SERVICE PERSONNEL')
      WRITE (PRINTR,1201) (TTOT(2,YR),YR = 1, NYEARS, 1)
 1201 FORMAT (8X,'PROFESSIONALS',9X,5F10.0)
      WRITE (PRINTR,1301) (ATOT(2,YR),YR = 1, NYEARS, 1)
 1301 FORMAT (8X,'AIDES',17X,5F10.0)
C
      DO 2000 YR = 1, NYEARS, 1
         TTOT(3,YR) = TTOT(1,YR) + TTOT(2,YR)
         ATOT(3,YR) = ATOT(1,YR) + ATOT(2,YR)
 2000 CONTINUE
C
      WRITE (PRINTR,2600)
 2600 FORMAT (///1X,'TOTAL PERSONNEL')
      WRITE (PRINTR,2700) (TTOT(3,YR),YR=1,NYEARS,1)
 2700 FORMAT (8X,'TEACHERS & PROFSNLS',3X,5F10.0)
      WRITE (PRINTR,2800) (ATOT(3,YR),YR=1,NYEARS,1)
 2800 FORMAT (8X,'AIDES',17X,5F10.0)
      RETURN
      END
C-----
      SUBROUTINE OUT8(SRVSTF,SRVNAM,SPVSIZ,RELSTF,RELNAM,RELSIZ)
      IMPLICIT REAL (A-Z)
C     OUTPUT EIGHT
C
C     PARAMETERS
C
      DIMENSION SRVSTF(36,2,5), SRVNAM(36,2,8)
      DIMENSION RELSTF(36,2,5), RELNAM(36,2,8)
      INTEGER SRVSIZ,RELSIZ
C
C     PARAMETERS FROM COMMON
C
      COMMON /COMTXT/ WHERE(8), WHO(8), WHAT(8), PAGE
      INTEGER PAGE
      COMMON /COMYR/ YEARS (6)
      INTEGER YEARS
      COMMON /COMFIL/ PRIIN,PRIOU,SECOUT,PRINTR
      INTEGER PRIIN,PRIOU,SECOUT,PRINTR
      COMMON /COMPOS/ FIRST,LAST
      INTEGER FIRST,LAST
      COMMON /COMINF/ INFQAN,INFCST
      INTEGER INFQAN,INFCST
      COMMON /COMW/ FULL,ABBREV
      INTEGER FULL,ABBREV
      COMMON /COMSTF/ TEACHR, AIDE, AIDTCH
      INTEGER TEACHR, AIDE, AIDTCH
      COMMON/COMCST/ CURDOL,ACTUAL
      INTEGER CURDOL,ACTUAL
      COMMON /COMBAS/ BASEYR,NYEARS
      INTEGER BASEYR,NYEARS
C
C     LOCAL VARIABLES
C
      INTEGER SRV,REL,J,YR
      DIMENSION T(5), A(5), TTOT(3,5), ATOT(3,5)
C      T AND A CONTAIN THE ANNUAL TOTAL NUMBER OF TEACHERS AND AIDES
C      AND TTOT AND ATOT CONTAIN RUNNING TOTALS.  THE FIRST
C      DIMENSION OF TTOT AND ATOT IS BEST UNDERSTOOD BY
C      REFERRING TO THE OUTPUT SHEET; THERE ARE THREE TOTALS NEEDED
C
      DO 6 YR = 1, NYEARS, 1
          DO 5 J = 1, 3, 1
           TTOT (J,YR) = 0
           ATOT (J,YR) = 0
    5     CONTINUE
    6 CONTINUE
C
      WRITE(PRINTR,17)(WHERE(J),J=1,8),
     #            (WHO(J),J=1,8,1),(WHAT(J),J=1,8),PAGE
   17 FORMAT (1H1,79X,8A4,/,80X,8A4,/,80X,8A4,/,80X,'PAGE',I3)
      PAGE = PAGE + 1
      WRITE (PRINTR,10)
   10 FORMAT (/,40X,'REPORT 8',/21X,'NUMBER OF',
     #         1X,'PERSONNEL BY PROGRAM AND SERVICE',//)
      WRITE (PRINTR,20) (YEARS(YR),YEARS(YR+1),YR = 1, NYEARS, 1)
   20 FORMAT (//30X,5(3X,'19',I2,'-',I2))
      WRITE (PRINTR,30)
   30 FORMAT (/1X,'INSTRUCTIONAL PROGRAMS')
```

```
C
      DO 1000 SRV = 1, SRVSIZ, 1
          DO 100 YR = 1, NYEARS, 1
              TTOT(1,YR) = TTOT(1,YR) + SRVSTF(SRV,TEACHR,YR)
              ATOT(1,YR) = ATOT(1,YR) + SRVSTF(SRV,AIDE,YR)
  100     CONTINUE
          WRITE (PRINTR,110) (SRVNAM(SRV,FULL,J),J = 1,8,1)
  110     FORMAT (/1X,8A4)
          WRITE (PRINTR,120) (SRVSTF(SRV,TEACHR,YR),YR=1,NYEARS,1)
  120     FORMAT (8X,'TEACHERS',14X,5F10.0)
          WRITE (PRINTR,130) (SRVSTF(SRV,AIDE,YR),YR=1,NYEARS,1)
  130     FORMAT (8X,'AIDES',17X,5F10.0)
 1000 CONTINUE
C
      WRITE (PRINTR,1100)
 1100 FORMAT (//1X,'TOTAL PROGRAM PERSONNEL')
      WRITE (PRINTR,1200) (TTOT(1,YR),YR = 1, NYEARS, 1)
 1200 FORMAT (8X,'TEACHERS',14X,5F10.0)
      WRITE (PRINTR,1300) (ATOT(1,YR),YR = 1, NYEARS, 1)
 1300 FORMAT (8X,'AIDES',17X,5F10.0)
C
      WRITE (PRINTR,730)
  730 FORMAT (///1X,'RELATED SERVICES')
C
      DO 1333 REL = 1, RELSIZ, 1
          DO 111 YR = 1, NYEARS, 1
              TTOT(2,YR) = TTOT(2,YR) + RELSTF(REL,TEACHR,YR)
              ATOT(2,YR) = ATOT(2,YR) + RELSTF(REL,AIDE,YR)
  111     CONTINUE
          WRITE (PRINTR,333) (RELNAM(REL,FULL,J),J = 1,8,1)
  333     FORMAT (/1X,8A4)
          WRITE (PRINTR,222) (RELSTF(REL,TEACHR,YR),YR=1,NYEARS,1)
  222     FORMAT (8X,'PROFESSIONALS',9X,5F10.0)
          WRITE (PRINTR,137) (RELSTF(REL,AIDE,YR),YR=1,NYEARS,1)
  137     FORMAT (8X,'AIDES',17X,5F10.0)
 1333 CONTINUE
C
      WRITE (PRINTR,1111)
 1111 FORMAT (//1X,'TOTAL SERVICE PERSONNEL')
      WRITE (PRINTR,1211) (TTOT(2,YR),YR = 1, NYEARS, 1)
 1211 FORMAT (8X,'PROFESSIONALS',9X,5F10.0)
      WRITE (PRINTR,1311) (ATOT(2,YR),YR = 1, NYEARS, 1)
 1311 FORMAT (8X,'AIDES',17X,5F10.0)
C
      DO 2000 YR = 1, NYEARS, 1
          TTOT(3,YR) = TTOT(1,YR) + TTOT(2,YR)
          ATOT(3,YR) = ATOT(1,YR) + ATOT(2,YR)
 2000 CONTINUE
C
      WRITE (PRINTR,2600)
 2600 FORMAT (///1X,'TOTAL PERSONNEL')
      WRITE (PRINTR,2700) (TTOT(3,YR),YR=1,NYEARS,1)
 2700 FORMAT (8X,'TEACHERS',14X,5F10.0)
      WRITE (PRINTR,2800) (ATOT(3,YR),YR=1,NYEARS,1)
 2800 FORMAT (8X,'AIDES',17X,5F10.0)
      RETURN
      END
C------
      SUBROUTINE OUT9(CATNAM,SRVNAM,RELNAM,SRVPRM,SRVDUP,SRVSTF,
     $   RELSRV,RELSTF,SRVRAT,RELRAT,SRVCMP,RELCMP,COMP,
     #   RELCST,SRVCST,SRVSIZ,RELSIZ,CATSIZ)
      IMPLICIT REAL (A-Z)
C
C     PARAMETERS
C
      DIMENSION CATNAM(36,2,8), SRVNAM(36,2,8), RELNAM(36,2,8)
      DIMENSION SRVPRM(36,36,5), SRVDUP(36,36,5), SRVSTF(36,2,5)
      DIMENSION RELSRV(36,36,5), RELSTF(36,2,5)
      DIMENSION SRVRAT(36,3,5), RELRAT(36,3,5)
      DIMENSION SRVCMP(36,2), RELCMP(36,2), COMP(360,2)
      DIMENSION RELCST(36,2,5), SRVCST(36,2,5)
      INTEGER SRVSIZ,RELSIZ,CATSIZ,SRVCMP,RELCMP
C
C     PARAMETERS FROM COMMON
C
      COMMON /CONTXT/ WHERE(8), WHO(8), WHAT(8), PAGE
      INTEGER PAGE
      COMMON /COMYR/ YEARS (6)
      INTEGER YEARS
      COMMON /COMIFL/ CUMINF(5)
      COMMON /COMFIL/ PRIIN,PRIOU,SECOUT,PRINTR
      INTEGER PRIIN,PRIOU,SECOUT,PRINTR
      COMMON /COMPOS/ FIRST,LAST
      INTEGER FIRST,LAST
      COMMON /COMINF/ INFQAN,INFCST
      INTEGER INFQAN,INFCST
      COMMON /COMW/ FULL,ABBREV
      INTEGER FULL,ABBREV
      COMMON /COMSTF/ TEACHR, AIDE, AIDTCH
      INTEGER TEACHR, AIDE, AIDTCH
      COMMON/COMCST/ CURDOL,ACTUAL
      INTEGER CURDOL,ACTUAL
      COMMON /COMBAS/ BASEYR,NYEARS
      INTEGER BASEYR,NYEARS
      COMMON /COMCAT/ CATCS1(36,2,5), CATCS2(36,2,5), CATCS3(36,2,5)
C
C     LOCAL VARIABLES
C
      INTEGER SRV,REL,CAT,J,YR,TCHPTR
      DIMENSION COST(5)
C
C     LOOP OVER ALL CATEGORIES
C
      DO 2000 CAT = 1, CATSIZ, 1
         WRITE(PRINTR,17)(WHERE(J),J=1,8),
     #           (WHO(J),J=1,8,1),(WHAT(J),J=1,8),PAGE
   17    FORMAT (1H1,79X,8A4,/,80X,8A4,/,80X,8A4,/,80X,'PAGE',I3)
         PAGE = PAGE + 1
         WRITE (PRINTR,10)
   10    FORMAT (/,40X,'REPORT 9',/36X,'COSTS BY CATEGORY')
         WRITE (PRINTR,20) (YEARS(YR),YEARS(YR+1),YR=1,NYEARS,1)
   20    FORMAT (//33X,5(3X,'19',I2,'-',I2))
C
          WRITE (PRINTR,123) (CATNAM(CAT,FULL,J),J = 1,8,1)
  123     FORMAT (/1X,8A4,////1X,'INSTRUCTIONAL PROGRAMS')
          DO 200 YR = 1, NYEARS, 1
             CATCS1(CAT,CURDOL,YR) = 0
  200     CONTINUE
C
          DO 1000 SRV = 1, SRVSIZ, 1
```

```
                DO 300 YR = 1, NYEARS, 1
                    COST(YR) = 0
  300           CONTINUE
                DO 800 YR = 1, NYEARS, 1
C               THE FOLLOWING UGLY EXPRESSION ALLEGES TO BE THE
C               NUMBER OF STUDENTS FORM A CATEGORY TIMES THE COST
C               PER STUDENT IN THAT CATEGORY.
C               NOTE THAT IT IS ASSUMED THAT IF TEACHERS APE PRESENT
C               THEY ARE THE FIRST COMPONENT
C               IF NO TEACHERS ARE PRESENT, THE SERVICE (PROGRAM)
C               COSTS MUST BE PER PUPIL.
C
                    TCHPTR = SRVCMP(SRV,FIRST)
                    COST (YR) = 0
                     STDNTS= SRVPRM(SRV,CAT,YR) + SRVDUP(SRV,CAT,YR)
                     STDPGM= SRVRAT(SRV,TEACHR,YR) * COMP(TCHPTR,INFQAN)
                    IF (SRVRAT(SRV,TEACHR,YR) .NE. 0)
     #               COST(YR) = (STDNTS/STDPGM) * SRVCST(SRV,CURDOL,YR)
                    IF (SRVSTF(SRV,TEACHR,1) .EQ. 0) COST(YR) =
     #              (SRVDUP(SRV,CAT,YR)+SRVPRM(SRV,CAT,YR))
     #               * SRVCST(SRV,CURDOL,YR)
           CATCS1(CAT,CURDOL,YR) = CATCS1(CAT,CURDOL,YR) + COST(YR)
  800           CONTINUE
                WRITE (PRINTR,900) (SRVNAM(SRV,FULL,J),J=1,8,1),
     #              (COST(YR),YR = 1, NYEARS, 1)
  900           FORMAT(/1X,8A4,5F10.0)
 1000       CONTINUE
C
            WRITE (PRINTR,1100) (CATCS1(CAT,CURDOL,YR),YR = 1, NYEARS,1)
 1100       FORMAT (//1X,'INSTRUCTIONAL PROGRAMS TOTAL',4X,5F10.0)
C
C     RELATED SERVICES
C
             WRITE(PRINTR,127)
  127       FORMAT (//1X,'RELATED SERVICES')
            DO 223 YR = 1, NYEARS, 1
                CATCS2(CAT,CURDOL,YR) = 0
  223       CONTINUE
            DO 1230 REL = 1, RELSIZ, 1
                DO 323 YR = 1, NYEARS, 1
                    COST(YR) = 0
  323           CONTINUE
C
                DO 823 YR = 1, NYEARS, 1
C               THE FOLLOWING UGLY EXPRESSION ALLEGES TO BE THE
C               NUMBER OF STUDENTS FORM A CATEGORY TIMES THE COST
C               PER STUDENT IN THAT CATEGORY.
C               NOTE THAT IT IS ASSUMED THAT IF TEACHERS ARE PRESENT
C               THEY ARE THE FIRST COMPONENT
C               IF NO TEACHERS ARE PRESENT, THE SERVICE (PROGRAM)
C               COSTS MUST BE PER PUPIL.
C
                    TCHPTR = RELCMP(REL,FIRST)
                    COST(YR) = 0
                    IF (RELRAT(REL,TEACHR,YR) .NE. 0)
     #             COST(YR)=((RELSRV(REL,CAT,YR)
     #                         / RELRAT(REL,TEACHR,YR))
     #                      /COMP(TCHPTR,INFQAN)) * RELCST(REL,CURDOL,YR)
                    IF (RELSTF(REL,TEACHR,1) .EQ. 0) COST(YR) =
     #              RELSRV(REL,CAT,YR)
     #            * RELCST(REL,CURDOL,YR)
      CATCS2(CAT,CURDOL,YR) = CATCS2(CAT,CURDOL,YR) + COST(YR)
  623          CONTINUE
C
               WRITE (PRINTR,923) (RELNAM(REL,FULL,J),J=1,8,1),
     #               (COST(YR),YR = 1, NYEARS, 1)
  923          FORMAT(/1X,8A4,5F10.0)
 1230       CONTINUE
            DO 1300 YR=1,NYEARS,1
               CATCS3(CAT,CURDOL,YR)=CATCS1(CAT,CURDOL,YR)
     #                              + CATCS2(CAT,CURDOL,YR)
               CATCS3(CAT,ACTUAL,YR)=CATCS3(CAT,CURDOL,YR)*CUMINF(YR)
 1300          CONTINUE
            WRITE (PRINTR,1323) (CATCS2(CAT,CURDOL,YR),YR = 1, NYEARS,1)
 1323       FORMAT (//1X,'RELATED SERVICES TOTAL',10X,5F10.0)
            WRITE(PRINTR,1352) (CATCS3(CAT,CURDOL,YR),YR=1,NYEARS,1)
 1352       FORMAT(//1X,'CATEGORY TOTAL (CONSTANT $)',5X,5F10.0)
            WRITE(PRINTR,1357) (CATCS3(CAT,ACTUAL,YR),YR=1,NYEARS,1)
 1357       FORMAT(1X,'CATEGORY TOTAL (INFLATED $)',5X,5F10.0)
 2600 CONTINUE
C
C     END OF CATEGORY LOOP
      RETURN
      END
C------
      SUBROUTINE OUT10(CATNAM,SRVNAM,RELNAM,SRVPRM,SRVDUP,SRVSTF,
     #   RELSRV,RELSTF,SRVRAT,RELRAT,SRVCMP,RELCMP,COMP,
     #   RELCST,SRVCST,SRVSIZ,RELSIZ,CATSIZ)
      IMPLICIT REAL (A-Z)
C
C     PARAMETERS
C
      DIMENSION CATNAM(36,2,8), SRVNAM(36,2,8), RELNAM(36,2,8)
      DIMENSION SRVPRM(36,36,5), SRVDUP(36,36,5), SRVSTF(36,2,5)
      DIMENSION RELSRV(36,36,5), RELSTF(36,2,5)
      DIMENSION SRVRAT(36,3,5), RELRAT(36,3,5)
      DIMENSION SRVCMP(36,2), RELCMP(36,2), COMP(360,2)
      DIMENSION RELCST(36,2,5), SRVCST(36,2,5)
      INTEGER SRVSIZ,RELSIZ,CATSIZ,SRVCMP,RELCMP
C
C     PARAMETERS FROM COMMON
C
      COMMON /COMTXT/ WHERE(8), WHO(8), WHAT(8), PAGE
      INTEGER PAGE
      COMMON /COMYR/ YEARS (6)
      INTEGER YEARS
      COMMON /COMIFL/ CUMINF(5)
      COMMON /COMFIL/ PRIIN,PRIOU,SECOUT,PRINTR
      INTEGER PRIIN,PRIOU,SECOUT,PRINTR
      COMMON /COMPG3/ FIRST,LAST
      INTEGER FIRST,LAST
      COMMON /COMINF/ INFQAN,INFCST
      INTEGER INFQAN,INFCST
      COMMON /COMM/ FULL,ABBREV
      INTEGER FULL,ABBREV
      COMMON /COMSTF/ TEACHR, AIDE, AIDTCH
      INTEGER TEACHR, AIDE, AIDTCH
      COMMON/COMCST/ CURDOL,ACTUAL
      INTEGER CURDOL,ACTUAL
      COMMON /COMBAS/ BASEYR,NYEARS
      INTEGER BASEYR,NYEARS
C
C     LOCAL VARIABLES
C
      INTEGER SRV,REL,CAT,CST,J,YR,TCHPTR
      DIMENSION TOTCST(6,5)
      COMMON /COMEXP/ SRVEXP(36,2,5), RELEXP(36,2,5)
C     THE FIRST DIMENSION INDICATES WHICH OF THE 6 TOTALS IS HELD
      DO 100 YR = 1, NYEARS, 1
          DO 50 J = 1, 6, 1
              TOTCST(J,YR) = 0
   50     CONTINUE
  100 CONTINUE
C
      WRITE(PRINTR,17)(WHERE(J),J=1,8),
     #        (WHO(J),J=1,8,1),(WHAT(J),J=1,8),PAGE
   17 FORMAT (1H1,79X,8A4,/,80X,8A4,/,80X,8A4,/,80X,'PAGE',13)
      PAGE = PAGE + 1
      WRITE (PRINTR,10)
   10 FORMAT (/,40X,'REPORT 10',/31X,'COSTS BY PROGRAMS AND SERVICES')
      WRITE (PRINTR,20) (YEARS(YR),YEARS(YR+1),YR = 1, NYEARS, 1)
   20 FORMAT (//33X,5(3X,'19',I2,'-',I2))
      WRITE (PRINTR,30)
   30 FORMAT (/1X,'INSTRUCTIONAL PROGRAMS')
C
          DO 1000 SRV = 1, SRVSIZ, 1
              DO 800 YR = 1, NYEARS, 1
C             THE FOLLOWING UGLY EXPRESSION ALLEGES TO BE THE
C             NUMBER OF STUDENTS FORM A CATEGORY TIMES THE COST
C             PER STUDENT IN THAT CATEGORY.
C             NOTE THAT IT IS ASSUMED THAT IF TEACHERS ARE PRESENT
C             THEY ARE THE FIRST COMPONENT
C             IF NO TEACHERS ARE PRESENT, THE SERVICE (PROGRAM)
C             COSTS MUST BE PER PUPIL.
C
                  TCHPTR = SRVCMP(SRV,FIRST)
                  SRVEXP (SRV,CURDOL,YR) = 0
                  IF (SRVRAT(SRV,TEACHR,YR) .GT. 0.0)
     #            SRVEXP(SRV,CURDOL,YR)=(((SRVDUP(SRV,CATSIZ+1,YR)+
     #                       SRVPRM(SRV,CATSIZ+1,YR))
     #                           / SRVRAT(SRV,TEACHR,YR))
     #                      /COMP(TCHPTR,INFQAN)) * SRVCST(SRV,CURDOL,YR)
                  IF (SRVSTF(SRV,TEACHR,1) .EQ. 0.0)
     #                SRVEXP(SRV,CURDOL,YR) =
     #            (SRVDUP(SRV,CATSIZ+1,YR)+SRVPRM(SRV,CATSIZ+1,YR))
     #           * SRVCST(SRV,CURDOL,YR)
                  SRVEXP(SRV,ACTUAL,YR) =
     #                CUMINF(YR) * SRVEXP(SRV,CURDOL,YR)
                  TOTCST(1,YR) = TOTCST(1,YR) + SRVEXP(SRV,CURDOL,YR)
                  TOTCST(2,YR) = TOTCST(2,YR) + SRVEXP(SRV,ACTUAL,YR)
  800         CONTINUE
C
              WRITE (PRINTR,900) (SRVNAM(SRV,FULL,J),J=1,8,1),
     #              (SRVEXP(SRV,CURDOL,YR),YR = 1, NYEARS, 1)
  900         FORMAT(/1X,8A4,5F10.0)
 1000     CONTINUE
C
      WRITE (PRINTR,2200) (TOTCST(1,YR),YR=1,NYEARS,1)
 2200 FORMAT (/1X,'TOTAL PROGRAM COST (CONSTANT $)',1X,5F10.0)
      WRITE (PRINTR,2207) (TOTCST(2,YR),YR=1,NYEARS,1)
 2207 FORMAT (1X,'TOTAL PROGRAM COST (INFLATED $)',1X,5F10.0)
      WRITE (PRINTR,38)
   38 FORMAT (//1X,'RELATED SERVICES')
C
C     RELATED SERVICES
C
          DO 1110 REL = 1, RELSIZ, 1
              DO 811 YR = 1, NYEARS, 1
C             THE FOLLOWING UGLY EXPRESSION ALLEGES TO BE THE
C             NUMBER OF STUDENTS FORM A CATEGORY TIMES THE COST
C             FER STUDENT IN THAT CATEGORY.
C             NOTE THAT IT IS ASSUMED THAT IF TEACHERS ARE PRESENT
C             THEY ARE THE FIRST COMPONENT
C             IF NO TEACHERS ARE PRESENT, THE SERVICE (PROGRAM)
C             COSTS MUST BE PER PUPIL.
C
                  TCHPTR = RELCMP(REL,FIRST)
                  RELEXP (REL,CURDOL,YR) = 0
                  IF (RELRAT(REL,TEACHR,YR) .GT. 0.0)
     #            RELEXP(REL,CURDOL,YR) = ((RELSRV(REL,CATSIZ+1,YR)
     #                        / RELRAT(REL,TEACHR,YR))
     #                    /COMP(TCHPTR,INFQAN)) * RELCST(REL,CURDOL,YR)
                  IF (RELSTF(REL,TEACHR,1) .EQ. 0.0)
     #            RELEXP(REL,CURDOL,YR) =
     #            RELSRV(REL,CATSIZ+1,YR)
     #           * RELCST(REL,CURDOL,YR)
                  RELEXP(REL,ACTUAL,YR) =
     #            CUMINF(YR) * RELEXP(REL,CURDOL,YR)
                  TOTCST(3,YR) = TOTCST(3,YR) + RELEXP(REL,CURDOL,YR)
                  TOTCST(4,YR) = TOTCST(4,YR) + RELEXP(REL,ACTUAL,YR)
  811         CONTINUE
C
              WRITE (PRINTR,911) (RELNAM(REL,FULL,J),J=1,8,1),
     #              (RELEXP(REL,CURDOL,YR),YR = 1, NYEARS, 1)
  911         FORMAT(/1X,8A4,5F10.0)
 1110     CONTINUE
C
      WRITE (PRINTR,2211) (TOTCST(3,YR),YR=1,NYEARS,1)
 2211 FORMAT (/1X,'TOTAL SERVICES COST (CONSTANT $)',5F10.0)
      WRITE (PRINTR,2214) (TOTCST(4,YR),YR=1,NYEARS,1)
 2214 FORMAT (1X,'TOTAL SERVICES COST (INFLATED $)',5F10.0)
      DO 3000 YR = 1, NYEARS, 1
          TOTCST(5,YR) = TOTCST(1,YR) + TOTCST (3,YR)
          TOTCST(6,YR) = TOTCST(2,YR) + TOTCST (4,YR)
 3000 CONTINUE
C
      WRITE (PRINTR,3200) (TOTCST(5,YR), YR = 1, NYEARS, 1)
 3200 FORMAT (//1X,'TOTAL COST (CONSTANT $)',9X,5F10.0)
      WRITE (PRINTR,3300) (TOTCST(6,YR), YR = 1, NYEARS, 1)
 3300 FORMAT (1X,'TOTAL COST (INFLATED $)',9X,5F10.0)
      RETURN
      END
C------
      SUBROUTINE OUT113(CATNAM,SRVNAM,RELNAM,SRVPRM,SRVDUP,SRVSTF,
     #   RELSRV,RELSTF,SRVRAT,RELRAT,SRVCMP,RELCMP,COMP,
     #   RELCST,SRVCST,SRVSIZ,RELSIZ,CATSIZ,CATUDP)
      IMPLICIT REAL (A-Z)
C
C     PARAMETERS
C
```

```
      DIMENSION CATNAM(36,2,8), SRVNAM(36,2,8), RELNAM(36,2,8)
      DIMENSION SRVPRM(36,36,5), SRVDUP(36,36,5), SRVSTF(36,2,5)
      DIMENSION RELSRV(36,36,5), RELSTF(36,2,5)
      DIMENSION SRVRAT(36,3,5), RELRAT(36,3,5)
      DIMENSION SRVCMP(36,2), RELCMP(36,2), COMP(360,2)
      DIMENSION RELCST(36,2,5), SRVCST(36,2,5)
      DIMENSION CATUDP(36,5)
      INTEGER SRVSIZ,RELSIZ,CATSIZ,SRVCMP,RELCMP,TCHPTR
C
C     PARAMETERS FROM COMMON
C
      COMMON /COMTXT/ WHERE(8), WHO(8), WHAT(8), PAGE
      INTEGER PAGE
      COMMON /COMYR/ YEARS (6)
      INTEGER YEARS
      COMMON /COMIFL/ CUMINF(5)
      COMMON /COMFIL/ PRIIN,PRIOU,SECOUT,PRINTR
      INTEGER PRIIN,PRIOU,SECOUT,PRINTR
      COMMON /COMPOS/ FIRST,LAST
      INTEGER FIRST,LAST
      COMMON /COMINF/ INFQAN,INFCST
      INTEGER INFCAN,INFCST
      COMMON /COMW/ FULL,ABBREV
      INTEGER FULL,ABBREV
      COMMON /COMSTF/ TEACHR, AIDE, AIDTCH
      INTEGER TEACHR, AIDE, AIDTCH
      COMMON/COMCST/ CURDOL,ACTUAL
      INTEGER CURDOL,ACTUAL
      COMMON /COMBAS/ BASEYR,NYEARS
      INTEGER BASEYR,NYEARS
      COMMON /CONTOT/ TOTROL,TOTSPC
      DIMENSION TOTROL(5), TOTSPC(5)
C
C     LOCAL VARIABLES
C
      INTEGER SRV,REL,CAT,J,YR
      DIMENSION TOTCST(6,5),AVGCST(2,5),CATCST(36,2,5),COST(5)
C     THE FIRST DIMENSION INDICATES WHICH OF THE 6 TOTALS IS HOLD
      DIMENSION TOT13(36,5)
C     TOT13(CAT,YR) USED TO HOLD COST PER STUDENT FOR OUT13
      DIMENSION TEMP13(36,5)
      INTEGER TCAT,TYR
C     TEMP13 IS USED TO PRINT INFLATED
C     COST PER STUDENT IN SUBROUTINE OUT113
C
C     ZERO OUT TOTCST
C
      DO 100 YR = 1, NYEARS, 1
          DO 50 J = 1, 6, 1
              TOTCST(J,YR) = 0
   50     CONTINUE
  100 CONTINUE
C
      DO 150 CAT=1,CATSIZ,1
         DO 120 YR=1,NYEARS,1
            TOT13(CAT,YR)=0
  120       CONTINUE
  150    CONTINUE
C
      WRITE(PRINTR,17)(WHERE(J),J=1,8),
     #           (WHO(J),J=1,8,1),(WHAT(J),J=1,8),PAGE
   17 FORMAT (1H1,79X,8A4,/,80X,8A4,/,80X,8A4,/,80X,'PAGE',I3)
      PAGE = PAGE + 1
      WRITE (PRINTR,10)
   10 FORMAT (/,40X,'REPORT 11',/31X,
     #   'COSTS PER STUDENT BY CATEGORY',/33X,'INSTRUCTIONAL PROGRAMS')
      WRITE (PRINTR,20) (YEARS(YR),YEARS(YR+1),YR = 1, NYEARS, 1)
   20 FORMAT (//32X,5(3X,'19',I2,'-',I2))
C
      DO 2000 CAT = 1, CATSIZ, 1
          WRITE (PRINTR,123) (CATNAM(CAT,FULL,J),J = 1,8,1)
  123     FORMAT (/1X,8A4)
          DO 200 YR = 1, NYEARS, 1
              CATCST(CAT,CURDOL,YR) = 0
  200     CONTINUE
C
          DO 1000 SRV = 1, SRVSIZ, 1
              DO 300 YR = 1, NYEARS, 1
                  COST(YR) = 0
  300         CONTINUE
              DO 800 YR = 1, NYEARS, 1
C             THE FOLLOWING UGLY EXPRESSION ALLEGES TO BE THE
C             NUMBER OF STUDENTS FORM A CATEGORY TIMES THE COST
C             PER STUDENT IN THAT CATEGORY.
C             NOTE THAT IT IS ASSUMED THAT IF TEACHERS ARE PRESENT
C             THEY ARE THE FIRST COMPONENT
C             IF NC TEACHERS ARE PRESENT, THE SERVICE (PROGRAM)
C             COSTS MUST BE PER PUPIL.
C
                  TCHPTR = SRVCMP(SRV,FIRST)
                  COST (YR) = 0
                   STDNTS= SRVPRM(SRV,CAT,YR) + SRVDUP(SRV,CAT,YR)
                   STDPGM= SRVRAT(SRV,TEACHR,YR) * COMP(TCHPTR,INFQAN)
                  IF (SRVRAT(SRV,TEACHR,YR) .NE. 0.0)
     #            COST(YR)=
     #           (((SRVPRM(SRV,CAT,YR)+SRVDUP(SRV,CAT,YR))
     #                     / SRVRAT(SRV,TEACHR,YR))
     #               /COMP(TCHPTR,INFQAN))*SRVCST(SRV,CURDOL,YR)
                  IF (SRVSTF(SRV,TEACHR,1) .EQ. 0.0) COST(YR) =
     #            (SRVDUP(SRV,CAT,YR)+SRVPRM(SRV,CAT,YR))
     #           * SRVCST(SRV,CURDOL,YR)
      CATCST(CAT,CURDOL,YR) = CATCST(CAT,CURDOL,YR) + COST(YR)
  800         CONTINUE
 1000     CONTINUE
C
C          CONVERT CATCST TO COST PER PUPIL
           DO 1077 YR = 1, NYEARS, 1
              TOTCST(1,YR) = TOTCST(1,YR) + CATCST(CAT,CURDOL,YR)
              TOT13(CAT,YR)=TOT13(CAT,YR) + CATCST(CAT,CURDOL,YR)
        CATCST(CAT,CURDOL,YR) = CATCST(CAT,CURDOL,YR)/CATUDP(CAT,YR)
              CATCST(CAT,ACTUAL,YR)=CATCST(CAT,CURDOL,YR) * CUMINF(YR)
 1077      CONTINUE
          WRITE (PRINTR,1100) (CATCST(CAT,CURDOL,YR),YR = 1, NYEARS,1)
 1100     FORMAT (1X,'CONSTANT $',21X,5F10.0)
         WRITE (PRINTR,1400)(CATCST(CAT,ACTUAL,YR),YR=1,NYEARS,1)
 1400     FORMAT (1X,'INFLATED $',21X,5F10.0)
 2000 CONTINUE
C
C     END OF CATEGORY LOOP
      DO 2100 YR = 1, NYEARS, 1
```

```
          TOTCST(2,YR) = TOTCST (1,YR) * CUMINF(YR)
          AVGCST(CURDOL,YR) = TOTCST(1,YR) / TOTSPC(YR)
          AVGCST(ACTUAL,YR) = TOTCST(2,YR) / TOTSPC(YR)
 2100 CONTINUE
      WRITE(PRINTR,2150)
 2150 FORMAT(/1X,'ALL CATEGORIES AVERAGE COST PER STUDENT')
      WRITE (PRINTR,2200) (AVGCST(1,YR),YR=1,NYEARS,1)
 2200 FORMAT (/1X,'CONSTANT $',21X,5F10.0)
      WRITE (PRINTR,2207) (AVGCST(2,YR),YR=1,NYEARS,1)
 2207 FORMAT (1X,'INFLATED $',21X,5F10.0)
C
C     OUTPUT 12
C
      WRITE(PRINTR,16)(WHERE(J),J=1,8),
     #           (WHO(J),J=1,8,1),(WHAT(J),J=1,8),PAGE
   16 FORMAT (1H1,79X,8A4,/,80X,8A4,/,80X,8A4,/,80X,'PAGE',I3)
      PAGE=PAGE + 1
      WRITE (PRINTR,2215)
 2215 FORMAT (/,40X,'REPORT 12'/31X,'COSTS PER',
     #        1X,'STUDENT BY CATEGORY',/35X,'RELATED SERVICES',//)
      WRITE (PRINTR,2220) (YEARS(YR),YEARS(YR+1),YR = 1, NYEARS, 1)
 2220 FORMAT (//32X,5(3X,'19',I2,'-',I2))
C
C     RELATED SERVICES
C
      DO 2230 CAT = 1, CATSIZ, 1
          WRITE (PRINTR,124) (CATNAM(CAT,FULL,J),J = 1,8,1)
  124     FORMAT (/1X,8A4)
             DO 223 YR = 1, NYEARS, 1
              CATCST(CAT,CURDOL,YR) = 0
  223     CONTINUE
C
          DO 1230 REL = 1, RELSIZ, 1
              DO 323 YR = 1, NYEARS, 1
                  COST(YR) = 0
  323         CONTINUE
              DO 823 YR = 1, NYEARS, 1
C             THE FOLLOWING UGLY EXPRESSION ALLEGES TO BE THE
C             NUMBER OF STUDENTS FORM A CATEGORY TIMES THE COST
C             PER STUDENT IN THAT CATEGORY.
C             NOTE THAT IT IS ASSUMED THAT IF TEACHERS ARE PRESENT
C             THEY ARE THE FIRST COMPONENT
C             IF NO TEACHERS ARE PRESENT, THE SERVICE (PROGRAM)
C             COSTS MUST BE PER PUPIL.
C
                  TCHPTR = RELCMP(REL,FIRST)
                  COST(YR) = 0
                  IF (RELRAT(REL,TEACHR,YR) .NE. 0.0)
     #           COST(YR)=((RELSRV(REL,CAT,YR)
     #                        / RELRAT(REL,TEACHR,YR))
     #                    /COMP(TCHPTR,INFQAN)) * RELCST(REL,CURDOL,YR)
                  IF (RELSTF(REL,TEACHR,1) .EQ. 0.0) COST(YR) =
     #            RELSRV(REL,CAT,YR)
     #           * RELCST(REL,CURDOL,YR)
       CATCST(CAT,CURDOL,YR) = CATCST(CAT,CURDOL,YR) + COST(YR)
  823         CONTINUE
 1230     CONTINUE
C
C          CONVERT CATCST TO COST PER PUPIL
C
```

```
           DO 1277 YR = 1, NYEARS, 1
              TOTCST(3,YR) = TOTCST(3,YR) + CATCST(CAT,CURDOL,YR)
              TOT13(CAT,YR)=TOT13(CAT,YR) + CATCST(CAT,CURDOL,YR)
            IF(RELSRV(RELSIZ+1,CAT,YR) .LE. 0.0)CATCST(CAT,CURDOL,YR)=0
            IF (RELSRV(RELSIZ+1,CAT,YR) .GT. 0.0)
     #      CATCST(CAT,CURDOL,YR)=CATCST(CAT,CURDOL,YR)/CATUDP(CAT,YR)
            CATCST(CAT,ACTUAL,YR) = CATCST(CAT,CURDOL,YR) * CUMINF(YR)
 1277      CONTINUE
          WRITE (PRINTR,1123) (CATCST(CAT,CURDOL,YR),YR = 1, NYEARS,1)
 1123     FORMAT (1X,'CONSTANT $',21X,5F10.0)
          WRITE (PRINTR,1411) (CATCST(CAT,ACTUAL,YR),YR = 1, NYEARS,1)
 1411     FORMAT (1X,'INFLATED $',21X,5F10.0)
 2330 CONTINUE
C
      DO 2123 YR = 1, NYEARS, 1
         TOTCST(4,YR) = TOTCST (3,YR) * CUMINF(YR)
         AVGCST(CURDOL,YR)=TOTCST(3,YR)/TOTSPC(YR)
         AVGCST(ACTUAL,YR)=TOTCST(4,YR)/TOTSPC(YR)
 2123 CONTINUE
C
      WRITE(PRINTR,2150)
      WRITE (PRINTR,2229) (AVGCST(CURDOL,YR),YR=1,NYEARS,1)
 2229 FORMAT (/1X,'CONSTANT $',21X,5F10.0)
      WRITE (PRINTR,2247) (AVGCST(ACTUAL,YR),YR=1,NYEARS,1)
 2247 FORMAT (1X,'INFLATED $',21X,5F10.0)
C
C     OUTPUT 13
C
      WRITE(PRINTR,19)(WHERE(J),J=1,8),
     #           (WHO(J),J=1,8,1),(WHAT(J),J=1,8),PAGE
   19 FORMAT (1H1,79X,8A4,/,80X,8A4,/,80X,8A4,/,80X,'PAGE',I3)
      PAGE=PAGE + 1
 2510 FORMAT (/,40X,'REPORT 13',/28X,'TOTAL COSTS PER STUDENT',
     #        1X,'BY CATEGORY')
      WRITE (PRINTR,2510)
      WRITE (PRINTR,2520) (YEARS(YR),YEARS(YR+1),YR = 1, NYEARS, 1)
 2520 FORMAT (//33X,5(3X,'19',I2,'-',I2),/)
C
      WRITE (PRINTR, 2521)
 2521 FORMAT (/1X,'INSTRUCTIONAL PROGRAMS AND RELATED SERVICES')
      DO 3000 YR = 1, NYEARS, 1
          TOTCST(5,YR) = TOTCST(1,YR) + TOTCST (3,YR)
          TOTCST(6,YR) = TOTCST(2,YR) + TOTCST (4,YR)
          AVGCST(CURDOL,YR) = TOTCST(5,YR) / TOTSPC(YR)
          AVGCST(ACTUAL,YR) = TOTCST(6,YR) / TOTSPC(YR)
 3000 CONTINUE
C
      DO 4000 CAT=1,CATSIZ,1
         DO 3046 YR = 1, NYEARS, 1
             TOT13(CAT,YR) = TOT13(CAT,YR) / CATUDP(CAT,YR)
 3046    CONTINUE
         WRITE(PRINTR,3048) (CATNAM(CAT,FULL,J),J=1,8,1)
 3048    FORMAT(/1X,8A4,5F10.0)
         WRITE(PRINTR,3050) (TOT13(CAT,YR),YR=1,NYEARS,1)
 3050    FORMAT(1X,'CONSTANT $',20X,5F10.0)
      DO 3056 TYR = 1, NYEARS, 1
          DO 3054 TCAT = 1, CATSIZ, 1
            TEMP13(TCAT,TYR) = TOT13(TCAT,TYR) * CUMINF(TYR)
 3054 CONTINUE
 3056 CONTINUE
```

```
         WRITE(PRINTR,3060) (TEMP13(CAT,YR),YR=1,NYEARS,1)
 3060     FORMAT (1X,'INFLATED $',20X,5F10.0)
 4000    CONTINUE
      WRITE (PRINTR,3200) (AVGCST(CURDOL,YR), YR = 1, NYEARS, 1)
 3200 FORMAT (//1X,'AVERAGE COST (CONSTANT $)',7X,5F10.0)
      WRITE (PRINTR,3300) (AVGCST(ACTUAL,YR), YR = 1, NYEARS, 1)
 3300 FORMAT (1X,'AVERAGE COST (INFLATED $)',7X,5F10.0)
      RETURN
      END
C------
      SUBROUTINE OUT14(SRVPRM,SRVDUP,SRVNAM,SRVSIZ,RELSRV,
     #            RELNAM, RELSIZ,CATSIZ)
      IMPLICIT REAL (A-Z)
C
C     PARAMETERS
C
      DIMENSION SRVPRM(36,36,5),SRVDUP(36,36,5),RELSRV(36,36,5)
      DIMENSION SRVNAM(36, 2, 8), RELNAM(36, 2, 8)
      INTEGER SRVSIZ,RELSIZ,CATSIZ
C
C     PARAMETERS FROM COMMON
C
      COMMON /COMTXT/ WHERE(8), WHO(8), WHAT(8), PAGE
      INTEGER PAGE
      COMMON /COMYR/ YEARS (6)
      INTEGER YEARS
      COMMON /COMW/ FULL,ABBREV
      INTEGER FULL,ABBREV
      COMMON /COMBAS/ BASEYR,NYEARS
      INTEGER BASEYR,NYEARS
      COMMON /COMEXP/SRVEXP(36,2,5), RELEXP(36,2,5)
      COMMON/COMCST/ CURDOL,ACTUAL
      INTEGER CURDOL,ACTUAL
      COMMON /COMFIL/ PRIIN,PRIOU,SECOUT,PRINTR
      INTEGER PRIIN,PRIOU,SECOUT,PRINTR
      COMMON /COMIFL/ CUMINF(5)
      COMMON /CONTOT/ TOTROL,TOTSPC
      DIMENSION TOTROL(5), TOTSPC(5)
C
C     LOCAL VARIABLES
C
      INTEGER SRV,REL,CAT,J,YR
      DIMENSION COST(2,5)
      DIMENSION SRVTOT(5),RELTOT(5)
C
      DO 13 YR = 1, NYEARS, 1
         SRVTOT(YR) = 0
         RELTOT(YR) = 0
   13 CONTINUE
C
      WRITE(PRINTR,17)(WHERE(J),J=1,8),
     #          (WHO(J),J=1,8,1),(WHAT(J),J=1,8),PAGE
   17 FORMAT (1H1,79X,8A4,/,80X,8A4,/,80X,8A4,/,80X,'PAGE',I3)
      PAGE = PAGE + 1
      WRITE (PRINTR,100)
  100 FORMAT (/,40X,'REPORT 14',/,
     #      26X,'COSTS PER STUDENT BY PROGRAM AND SERVICE')
      WRITE(PRINTR,200)
  200 FORMAT (/,1X,'PROGRAM OR SERVICE')
      WRITE (PRINTR,300)(YEARS(YR), YEARS(YR+1), YR = 1,NYEARS,1)
  300 FORMAT (/1X,30X,5(3X,'19',I2,'-',I2))
      WRITE (PRINTR,400)
  400 FORMAT (/1X,'INSTRUCTIONAL PROGRAMS')
C
      DO 1000 SRV = 1,SRVSIZ, 1
          WRITE (PRINTR,500)(SRVNAM(SRV,FULL,J),J=1,8,1)
  500     FORMAT(/1X,8A4)
C         CONVERT COST TO PER PURPIL
C
          DO 750 YR = 1, NYEARS, 1
              SRVTOT(YR) = SPVTOT(YR) + SRVEXP(SRV,CURDOL,YR)
              COST (CURDOL,YR) = SRVEXP(SRV,CURDOL,YR) /
     #       (SRVPRM(SRV,CATSIZ+1,YR) + SRVDUP(SRV,CATSIZ+1,YR))
              COST (ACTUAL,YR) = COST(CURDOL,YR) * CUMINF(YR)
  750     CONTINUE
C
          WRITE(PRINTR,800) (COST(CURDOL,YR),YR=1, NYEARS, 1)
  800     FORMAT(1X,'CONSTANT $',20X,5F10.0)
          WRITE (PRINTR,900) (COST(ACTUAL,YR),YR=1,NYEARS,1)
  900     FORMAT (1X,'INFLATED $',20X,5F10.0)
 1000 CONTINUE
C
C       OUTPUT THE TOTALS
      DO 1200 YR =1, NYEARS,1
          COST(CURDOL,YR) = SRVTOT(YR)/TOTSPC(YR)
          COST(ACTUAL,YR) = COST(CURDOL,YR)*CUMINF(YR)
 1200 CONTINUE
C
      WRITE (PRINTR,1300)
 1300 FORMAT(/1X,'AVERAGE FOR INSTRUCTIONAL PROGRAMS')
      WRITE(PRINTR,1400) (COST(CURDOL,YR),YR=1,NYEARS,1)
 1400 FORMAT(1X,'CONSTANT $',20X,5F10.0)
      WRITE(PRINTR,1500) (COST(ACTUAL,YR),YR=1,NYEARS,1)
 1500 FORMAT(1X,'INFLATED $',20X,5F10.0)
C
      WRITE (PRINTR,411)
  411 FORMAT (///1X,'RELATED SERVICES')
C
      DO 1110 REL = 1,RELSIZ, 1
          WRITE (PRINTR,511)(RELNAM(REL,FULL,J),J=1,8,1)
  511     FORMAT(/1X,8A4)
C         CONVERT COST TO PER PURPIL
          DO 751 YR = 1, NYEARS, 1
              RELTOT(YR) = RELTOT(YR) + RELEXP(REL,CURDOL,YR)
              COST (CURDOL,YR) = RELEXP(REL,CURDOL,YR) /
     #                TOTSPC(YR)
              COST (ACTUAL,YR) = COST(CURDOL,YR) * CUMINF(YR)
  751     CONTINUE
C
          WRITE(PRINTR,811) (COST(CURDOL,YR),YR=1, NYEARS, 1)
  811     FORMAT(1X,'CONSTANT $',20X,5F10.0)
          WRITE (PRINTR,911) (COST(ACTUAL,YR),YR=1,NYEARS,1)
  911     FORMAT (1X,'INFLATED $',20X,5F10.0)
 1110 CONTINUE
C
C       OUTPUT THE TOTALS
      DO 1211 YR =1, NYEARS,1
          COST(CURDOL,YR) = RELTOT(YR)/
     #               TOTSPC(YR)
          COST(ACTUAL,YR) = COST(CURDOL,YR)*CUMINF(YR)
 1211 CONTINUE
C
      WRITE (PRINTR,1311)
 1311 FORMAT(/1X,'AVERAGE FOR RELATED SERVICES')
      WRITE(PRINTR,1411) (COST(CURDOL,YR),YR=1,NYEARS,1)
 1411 FORMAT(1X,'CONSTANT $',20X,5F10.0)
      WRITE(PRINTR,1511) (COST(ACTUAL,YR),YR=1,NYEARS,1)
 1511 FORMAT(1X,'INFLATED $',20X,5F10.0)
C      OUTPUT THE GRAND TOTALS
      DO 1222 YR =1, NYEARS,1
          COST(CURDOL,YR) = (SRVTOT(YR)+RELTOT(YR)) / TOTSPC(YR)
          COST(ACTUAL,YR) = COST(CURDOL,YR)*CUMINF(YR)
 1222 CONTINUE
C
      WRITE (PRINTR,1322)
 1322 FORMAT(//1X,'AVERAGE FOR ALL STUDENTS')
      WRITE(PRINTR,1422) (COST(CURDOL,YR),YR=1,NYEARS,1)
 1422 FORMAT(1X,'CONSTANT $',20X,5F10.0)
      WRITE(PRINTR,1522) (COST(ACTUAL,YR),YR=1,NYEARS,1)
 1522 FORMAT(1X,'INFLATED $',20X,5F10.0)
C
      RETURN
      END
C----
      SUBROUTINE OUT15(CATUDP, CATNAM, CATSIZ)
      IMPLICIT REAL (A-Z)
C
C      PARAMETERS
C
      INTEGER CATSIZ
      DIMENSION CATUDP(36,5), CATNAM(36,2,8)
C
C      PARAMETERS FROM COMMON
C
      COMMON /COMTXT/ WHERE(8), WHO(8), WHAT(8), PAGE
      INTEGER PAGE
      COMMON/COMCST/ CURDOL,ACTUAL
      INTEGER CURDOL,ACTUAL
      COMMON /COMFIL/ PRIIN,PRIOU,SECOUT,PRINTR
      INTEGER PRIIN,PRIOU,SECOUT,PRINTR
      COMMON /COMIFL/ CUMINF(5)
      COMMON /COMBAS/ BASEYR,NYEARS
      INTEGER BASEYR,NYEARS
      COMMON /CONTOT/ TOTROL,TOTSPC
      DIMENSION TOTROL(5), TOTSPC(5)
      COMMON /COMYR/ YEARS (6)
      INTEGER YEARS
      COMMON /COMCAT/ CATCS1(36,2,5), CATCS2(36,2,5), CATCS3(36,2,5)
      COMMON /COMW/ FULL,ABBREV
      INTEGER FULL,ABBREV
C
C     LOCALS
C
      DIMENSION COST(5), CSTPER(5), TOTCST(5)
      INTEGER CAT,YR,J
C
C      BEGIN OUT15
C
      WRITE(PRINTR,17)(WHERE(J),J=1,8),
     #           (WHO(J),J=1,8,1),(WHAT(J),J=1,8),PAGE
```

```
   17 FORMAT (1H1,79X,8A4,/,80X,8A4,/,80X,8A4,/,80X,'PAGE',I3)
      PAGE = PAGE + 1
      WRITE (PRINTR,50)
   50 FORMAT (/,40X,'REPORT 15',/,35X,
     #        'SUMMARY BY CATEGORY'//)
      DO 75 YR = 1, NYEARS, 1
         TOTCST(YR) = 0
   75 CONTINUE
C
      WRITE (PRINTR,80) (YEARS(YR), YEARS(YR+1), YR=1,NYEARS,1)
   80 FORMAT (33X,5(3X,'19',I2,'-',I2))
C
      DO 1000 CAT = 1, CATSIZ, 1
           WRITE (PRINTR,100) (CATNAM(CAT,FULL,J),J=1,8,1)
  100      FORMAT (/1X,8A4)
           DO 200 YR = 1, NYEARS, 1
                COST(YR) = CATCS1(CAT,CURDOL,YR) + CATCS2(CAT,CURDOL,YR)
                CSTPER(YR) = COST(YR) / CATUDP(CAT,YR)
                TOTCST(YR) = TOTCST(YR) + COST(YR)
  200      CONTINUE
C
           WRITE (PRINTR,300) (CATUDP(CAT,YR),YR=1, NYEARS, 1)
  300      FORMAT (1X,'STUDENTS (UNDUPLICATED)',9X,5F10.0)
           WRITE (PRINTR,400) (COST(YR),YR = 1, NYEARS, 1)
  400      FORMAT (1X,'COST (CONSTANT $)',15X,5F10.0)
           WRITE (PRINTR,500) (CSTPER(YR), YR = 1, NYEARS, 1)
  500      FORMAT (1X,'COST PER STUDENT (CONSTANT $)',3X,5F10.0)
 1000 CONTINUE
C
      WRITE (PRINTR,1100)
 1100 FORMAT (/1X,'TOTALS')
      WRITE (PRINTR,1200) (TOTSPC(YR), YR = 1, NYEARS, 1)
 1200 FORMAT (/1X,'STUDENTS (UNDUPLICATED)',9X,5F10.0)
      WRITE (PRINTR, 1300) (TOTCST(YR), YR = 1, NYEARS, 1)
 1300 FORMAT (/1X,'TOTAL COST (CONSTANT $)',9X,5F10.0)
      DO 1400 YR = 1, NYEARS, 1
         CSTPER(YR) = TOTCST(YR) / TOTSPC(YR)
 1400 CONTINUE
      WRITE (PRINTR,1500) (CSTPER(YR), YR = 1, NYEARS, 1)
 1500 FORMAT (1X,'COST PER STUDENT (CONSTANT $)',3X,5F10.0)
C     CONVERT TO INFLATED
      DO 1600 YR = 1, NYEARS, 1
          TOTCST (YR) = TOTCST(YR) * CUMINF(YR)
          CSTPER(YR)  = TOTCST(YR)/TOTSPC(YR)
 1600 CONTINUE
      WRITE (PRINTR,1700)(TOTCST(YR),YR = 1, NYEARS, 1)
 1700 FORMAT (/1X,'TOTAL COST (INFLATED $)',9X,5F10.0)
      WRITE (PRINTR, 1800) (CSTPER(YR), YR = 1, NYEARS, 1)
 1800 FORMAT (1X,'COST PER STUDENT (INFLATED $)',3X,5F10.0)
C
      RETURN
      END
C------
      SUBROUTINE OUT16(SRVPRM,SRVDUP,SRVNAM,SRVSIZ,RELSRV,
     #               RELNAM,RELSIZ,CATSIZ,SRVSTF,RELSTF)
      IMPLICIT REAL (A-Z)
C
C     PARAMTERS
C
      DIMENSION SRVPRM(36,36,5), SRVDUP(36,36,5), RELSRV(36,36,5)
      DIMENSION SRVNAM(36,2,8), RELNAM(36,2,8)
      DIMENSION SRVSTF(36,2,5), RELSTF(36,2,5)
      INTEGER SRVSIZ,RELSIZ,CATSIZ
C
C     PARAMETERS FROM COMMON
C
      COMMON /COMTXT/ WHERE(8), WHO(8), WHAT(8), PAGE
      INTEGER PAGE
      COMMON /CONTOT/ TOTROL,TOTSPC
      DIMENSION TOTROL(5), TOTSPC(5)
      COMMON /COMFIL/ PRIIN,PRIOU,SECOUT,PRINTR
      INTEGER PRIIN,PRIOU,SECOUT,PRINTR
      COMMON /COMW/ FULL,ABBREV
      INTEGER FULL,ABBREV
      COMMON /COMSTF/ TEACHR, AIDE, AIDTCH
      INTEGER TEACHR, AIDE, AIDTCH
      COMMON/COMCST/ CURDOL,ACTUAL
      INTEGER CURDOL,ACTUAL
      COMMON /COMBAS/ BASEYR,NYEARS
      INTEGER BASEYR,NYEARS
      COMMON /COMEXP/SRVEXP(36,2,5), RELEXP(36,2,5)
      COMMON /COMIFL/ CUMINF(5)
      COMMON /COMYR/ YEARS (6)
      INTEGER YEARS
C
C
C      LOCALS
C
      INTEGER SRV,CAT,REL,J,YR
      DIMENSION COST(2,5),STDNTS(5),STDTOT(5)
      DIMENSION STFTOT(2,5)
      DIMENSION SRVTOT(5),RELTOT(5)
C
C     BEGIN OUT16
C
      DO 13 YR = 1, NYEARS, 1
          SRVTOT(YR) = 0
          RELTOT(YR) = 0
          STDTOT(YR) = 0
          STFTOT(TEACHR,YR) = 0
          STFTOT(AIDE,YR) = 0
   13 CONTINUE
      WRITE(PRINTR,17)(WHERE(J),J=1,8),
     #             (WHO(J),J=1,8,1),(WHAT(J),J=1,8),PAGE
   17 FORMAT (1H1,79X,8A4,/,80X,8A4,/,80X,8A4,/,80X,'PAGE',I3)
      PAGE = PAGE + 1
      WRITE (PRINTR,100)
  100 FORMAT (/,40X,'REPORT 16',/,31X,'SUMMARY BY PROGRAM AND SERVICE')
      WRITE (PRINTR,300)(YEARS(YR), YEARS(YR+1), YR = 1,NYEARS,1)
  300 FORMAT (//,32X,5(3X,'19',I2,'-',I2))
      WRITE (PRINTR,400)
  400 FORMAT (/1X,'INSTRUCTIONAL PROGRAMS')
      DO 1000 SRV = 1,SRVSIZ, 1
          WRITE (PRINTR,500)(SRVNAM(SRV,FULL,J),J=1,8,1)
  500     FORMAT(/1X,8A4)
C         CALCULATE THE NUMBER OF STUDENTS
          DO 733 YR = 1, NYEARS, 1
              STDNTS(YR) = SRVPRM(SRV,CATSIZ+1,YR)
     $                   + SRVDUP(SRV,CATSIZ+1,YR)
C
```

```
          STDTOT(YR) = STDTOT(YR)+STDNTS(YR)
          STFTOT(TEACHR,YR)=STFTOT(TEACHR,YR)+SRVSTF(SRV,TEACHR,YR)
          STFTOT(AIDE,YR)=STFTOT(AIDE,YR)+SRVSTF(SRV,AIDE,YR)
              COST(CURDOL,YR) = SRVEXP(SRV,CURDOL,YR)
  733     CONTINUE
C
          WRITE(PRINTR,550)(STDNTS(YR),YR=1,NYEARS,1)
  550     FORMAT(1X,'STUDENTS (DUPLICATED)',11X,5F10.0)
          WRITE (PRINTR,560) (SRVSTF(SRV,TEACHR,YR),YR=1,NYEARS,1)
  560     FORMAT(1X,'TEACHERS',24X,5F10.0)
          WRITE (PRINTR,555) (SRVSTF(SRV,AIDE,YR),YR=1,NYEARS,1)
  555     FORMAT(1X,'AIDES',27X,5F10.0)
          WRITE (PRINTR,570) (COST(CURDOL,YR),YR=1,NYEARS,1)
  570     FORMAT(1X,'COST (CONSTANT $)',15X,5F10.0)
C
C         CONVERT COST TO PER PURPIL
C
          DO 750 YR = 1, NYEARS, 1
              SRVTOT(YR) = SRVTOT(YR) + COST(CURDOL,YR)
              COST (CURDOL,YR) = COST(CURDOL,YR) /
     #       (SRVPRM(SRV,CATSIZ+1,YR) + SRVDUP(SRV,CATSIZ+1,YR))
              COST (ACTUAL,YR) = COST(CURDOL,YR) * CUMINF(YR)
  750     CONTINUE
C
          WRITE(PRINTR,800) (COST(CURDOL,YR),YR=1, NYEARS, 1)
  800     FORMAT(1X,'COST PER STUDENT (CONSTANT $)',3X,5F10.0)
 1000 CONTINUE
C      OUTPUT THE TOTALS
C
      WRITE (PRINTR,1300)
 1300 FORMAT(/1X,'TOTAL FOR INSTRUCTIONAL PROGRAMS')
      WRITE(PRINTR,1353)(STDTOT(YR),YR=1,NYEARS,1)
 1353 FORMAT(1X,'STUDENTS (DUPLICATED)',11X,5F10.0)
          WRITE(PRINTR,1309) (SRVSTF(SRVSIZ+1,TEACHR,YR),YR=1,NYEARS,1)
 1309     FORMAT(1X,'TEACHERS',24X,5F10.0)
          WRITE(PRINTR,1310) (SRVSTF(SRVSIZ+1,AIDE,YR),YR=1,NYEARS,1)
 1310     FORMAT(1X,'AIDES',27X,5F10.0)
      WRITE(PRINTR,1400) (SRVTOT(YR),YR=1,NYEARS,1)
 1400 FORMAT(1X,'COST (CONSTANT $)',15X,5F10.0)
C
C     CONVERT TOTAL COSTS TO BE PER PUPIL
C
      DO 1410 YR = 1, NYEARS, 1
           COST(ACTUAL,YR)=CUMINF(YR)* SRVTOT(YR)
          COST(CURDOL,YR) = SRVTOT(YR) /
     #          TOTSPC(YR)
 1410 CONTINUE
      WRITE (PRINTR,1430)(COST(CURDOL,YR),YR=1,NYEARS,1)
 1430 FORMAT (1X,'COST PER STUDENT (CONSTANT $)',3X,5F10.0)
      WRITE(PRINTR,1432) (COST(ACTUAL,YR),YR=1,NYEARS,1)
 1432 FORMAT(1X,'COST (INFLATED $)',15X,5F10.0)
C     CONVERT TO COST PER PUPIL
C
      DO 1437 YR=1,NYEARS,1
         COST(ACTUAL,YR)=COST(ACTUAL,YR)/
     #          TOTSPC(YR)
1437     CONTINUE
C
      WRITE(PRINTR,1433) (COST(ACTUAL,YR),YR=1,NYEARS,1)
 1433 FORMAT (1X,'COST PER STUDENT (INFLATED $)',3X,5F10.0)
```

```
C
C     RELATED SERVICES
C
      WRITE (PRINTR,1441)
 1441 FORMAT (///1X,'RELATED SERVICES')
      DO 1440 REL = 1,RELSIZ, 1
          WRITE (PRINTR,644)(RELNAM(REL,FULL,J),J=1,8,1)
  644     FORMAT(/1X,8A4)
C         CALCULATE THE NUMBER OF STUDENTS
          DO 1733 YR = 1, NYEARS, 1
              STDNTS(YR) = RELSRV(REL,CATSIZ+1,YR)
C
              STDTOT(YR) = STDTOT(YR)+STDNTS(YR)
              STFTOT(TEACHR,YR)=STFTOT(TEACHR,YR)+RELSTF(REL,TEACHR,YR)
              STFTOT(AIDE,YR)=STFTOT(AIDE,YR)+RELSTF(REL,AIDE,YR)
              RELTOT(YR) = RELTOT(YR) + RELEXP(REL,CURDOL,YR)
              COST(CURDOL,YR) = RELEXP(REL,CURDOL,YR)
 1733     CONTINUE
C
          WRITE(PRINTR,650)(STDNTS(YR),YR=1,NYEARS,1)
  650     FORMAT(1X,'STUDENTS',24X,5F10.0)
          WRITE (PRINTR,660) (RELSTF(REL,TEACHR,YR),YR=1,NYEARS,1)
  660     FORMAT(1X,'PROFESSIONALS',19X,5F10.0)
          WRITE (PRINTR,661) (RELSTF(REL,AIDE,YR),YR=1,NYEARS,1)
  661     FORMAT(1X,'AIDES',27X,5F10.0)
          WRITE (PRINTR,670) (COST(CURDOL,YR),YR=1,NYEARS,1)
  670     FORMAT(1X,'COST (CONSTANT $)',15X,5F10.0)
C
C         CONVERT COST TO PER PURPIL
C
          DO 1750 YR = 1, NYEARS, 1
              IF (RELSRV(REL,CATSIZ+1,YR) .LE. 0.0)COST(CURDOL,YR) = 0.0
              IF( RELSRV(REL,CATSIZ+1,YR) .GT. 0.0 )
     #        COST (CURDOL,YR) = COST(CURDOL,YR) /
     #        RELSRV(REL,CATSIZ+1,YR)
              COST (ACTUAL,YR) = COST(CURDOL,YR) * CUMINF(YR)
 1750     CONTINUE
C
          WRITE(PRINTR,844) (COST(CURDOL,YR),YR=1, NYEARS, 1)
  844     FORMAT(1X,'COST PER STUDENT (CONSTANT $)',3X,5F10.0)
 1440 CONTINUE
C      OUTPUT THE TOTALS
C
      WRITE (PRINTR,1344)
 1344 FORMAT(/1X,'TOTAL FOR RELATED SERVICES')
      WRITE(PRINTR,653)
     #     (RELSRV(RELSIZ+1,CATSIZ+1,YR),YR=1,NYEARS,1)
  653 FORMAT(1X,'STUDENTS',24X,5F10.0)
          WRITE(PRINTR,1311) (RELSTF(RELSIZ+1,TEACHR,YR),YR=1,NYEARS,1)
 1311     FORMAT(1X,'PROFESSIONALS',19X,5F10.0)
          WRITE(PRINTR,1312) (RELSTF(RELSIZ+1,AIDE,YR),YR=1,NYEARS,1)
 1312     FORMAT(1X,'AIDES',27X,5F10.0)
      WRITE(PRINTR,1444) (RELTOT(YR),YR=1,NYEARS,1)
 1444 FORMAT(1X,'COST (CONSTANT $)',15X,5F10.0)
C
C     CALCULATE INFLATED COSTS
C     CONVERT TOTAL COSTS TO BE PER PUPIL
C
      DO 2410 YR = 1, NYEARS, 1
          COST(CURDOL,YR) = RELTOT(YR) / RELSRV(REL,CATSIZ+1,YR)
          COST(ACTUAL,YR) = RELTOT(YR) * CUMINF(YR)
 2410 CONTINUE
      WRITE (PRINTR,2430)(COST(CURDOL,YR),YR=1,NYEARS,1)
 2430 FORMAT (1X,'COST PER STUDENT (CONSTANT $)',3X,5F10.0)
C     DO INFLATED COSTS
C
      WRITE(PRINTR,2432) (COST(ACTUAL,YR),YR=1,NYEARS,1)
 2432 FORMAT(1X,'COST (INFLATED $)',15X,5F10.0)
C
C     CONVERT TO PER PUPIL COSTS
C
      DO 2450 YR=1,NYEARS
         COST(ACTUAL,YR)=COST(ACTUAL,YR)/RELSRV(REL,CATSIZ+1,YR)
 2450    CONTINUE
      WRITE(PRINTR,2433) (COST(ACTUAL,YR),YR=1,NYEARS,1)
 2433 FORMAT (1X,'COST PER STUDENT (INFLATED $)',3X,5F10.0)
C      GENERATE THE OVERALL TOTALS
C
       WRITE (PRINTR,2200)
 2200 FORMAT (//1X,'OVERALL TOTALS')
      WRITE (PRINTR,5400)(STFTOT(TEACHR,YR),YR=1,NYEARS,1)
 5400 FORMAT (1X,'TOTAL TEACHERS & PROFSNLS',7X,5F10.0)
      WRITE (PRINTR,5500)(STFTOT(AIDE,YR),YR=1,NYEARS,1)
 5500 FORMAT (1X,'TOTAL AIDES',21X,5F10.0)
C
C     TOTAL COSTS AND INFLATE
C
      DO 6000 YR = 1, NYEARS, 1
          COST(CURDOL,YR) = SRVTOT(YR) + RELTOT(YR)
          COST(ACTUAL,YR) = COST(CURDOL,YR) * CUMINF(YR)
 6000 CONTINUE
      WRITE (PRINTR,6100) (COST(CURDOL,YR),YR=1, NYEARS,1)
 6100 FORMAT (1X,'TOTAL COST (CONSTANT $)',9X,5F10.0)
      WRITE (PRINTR,6200) (COST(ACTUAL,YR),YR=1, NYEARS,1)
 6200 FORMAT (1X,'TOTAL COST (INFLATED $)',9X,5F10.0)
C
C      CONVERT TO PER PUPIL
C
      DO 7000 YR = 1,NYEARS,1
          COST(CURDOL,YR) = COST(CURDOL,YR)/TOTSPC(YR)
          COST(ACTUAL,YR) = COST(ACTUAL,YR)/TOTSPC(YR)
 7000 CONTINUE
C
      WRITE (PRINTR,7100) (COST(CURDOL,YR),YR=1,NYEARS,1)
 7100 FORMAT(1X,'COST PER STUDENT (CONSTANT $)',3X,5F10.0)
      WRITE (PRINTR,7200) (COST(ACTUAL,YR),YR=1,NYEARS,1)
 7200 FORMAT(1X,'COST PER STUDENT (INFLATED $)',3X,5F10.0)
      RETURN
      END
C------
      SUBROUTINE OUT17(DSTCMP,DSTNAM,DSTCST,DSTSIZ,DSTSTF,DSTPER,
     #                DSTSUP,COMP,CMPNAM)
      IMPLICIT REAL (A-Z)
C
C     PARAMETERS
C
      DIMENSION DSTNAM(36,2,8), CMPNAM(360,8)
      DIMENSION DSTCMP(36,2),COMP(360,2)
      DIMENSION DSTCST(36,2,5),DSTSUP(36,5),DSTSTF(36,2,5)
      DIMENSION DSTPER(36)
      INTEGER DSTSIZ,RELSIZ
      INTEGER RELCMP,DSTCMP
C
C    COMMON VARIABLES
C
      COMMON /CONSTF/ TEACHR, AIDE, AIDTCH
      INTEGER TEACHR, AIDE, AIDTCH
      COMMON /COMTXT/ WHERE(8), WHO(8), WHAT(8), PAGE
      INTEGER PAGE
      COMMON /COMFIL/ PRIIN,PRIOU,SECOUT,PRINTR
      INTEGER PRIIN,PRIOU,SECOUT,PRINTR
      COMMON /COMPOS/ FIRST,LAST
      INTEGER FIRST,LAST
      COMMON /COMINF/ INFQAN,INFCST
      INTEGER INFQAN,INFCST
      COMMON/COMCST/ CURDOL,ACTUAL
      INTEGER CURDOL,ACTUAL
      COMMON /COMYR/ YEARS (6)
      INTEGER YEARS
      COMMON /COMW/ FULL,ABBREV
      INTEGER FULL,ABBREV
      COMMON /COMBAS/ BASEYR,NYEARS
      INTEGER BASEYR,NYEARS
C
C     LOCAL VARIABLES
C
      INTEGER DST,REL,CMP,BEGCMP,ENDCMP,J,YR
C
C     OUTPUT SHEET SEVENTEEN
C
      WRITE(PRINTR,17)(WHERE(J),J=1,8),
     #           (WHO(J),J=1,8,1),(WHAT(J),J=1,8),PAGE
   17 FORMAT (1H1,79X,8A4,/,80X,8A4,/,80X,8A4,/,80X,'PAGE',I3)
      PAGE = PAGE + 1
      WRITE (PRINTR,10)(YEARS(YR),YEARS(YR+1),YR=1,NYEARS,1)
   10 FORMAT (/,40X,'REPORT 17',//
     #  30X,'DISTRICT SUPPORT SERVICES DESCRIPTION',
     #        //1X,'SUPPORT SERVICES',/6X,'RESOURCES',
     #     16X,'STAFF',8X,'PRICE',20X,
     #       'SERVICE LEVELS'/,61X,5(3X,'19',I2,'-',I2))
      DO 1000 DST = 1, DSTSIZ, 1
          WRITE(PRINTR,190) (DSTNAM(DST,FULL,J),J=1,8,1)
  190     FORMAT(//1X,8A4)
          BEGCMP = DSTCMP(DST,FIRST)
          ENDCMP = DSTCMP(DST,LAST)
          DO 500 CMP = BEGCMP,ENDCMP,1
              WRITE (PRINTR,200)
     #        (CMPNAM(CMP,J),J=1,8,1),COMP(CMP,INFCST)
  200         FORMAT (/1X,5X,8A4,1X,F10.0)
  500     CONTINUE
          WRITE (PRINTR,520) DSTPER(DST),DSTCST(DST,CURDOL,1),
     #        (DSTSUP(DST,YR), YR = 1, NYEARS, 1)
  520     FORMAT (/6X,'TOTAL',14X,F10.1,4X,F10.0,11X,5F10.2)
 1000 CONTINUE
C
      RETURN
      END
C-----
      SUBROUTINE OUT18(DSTSUP,DSTNAM,DSTCST,DSTSTF,DSTSIZ)
      IMPLICIT REAL(A-Z)
```

```
C
C     PARAMETERS
C
      DIMENSION DSTSUP(36,5), DSTNAM(36,2,8), DSTCST(36,2,5)
      DIMENSION DSTSTF(36,2,5)
      INTEGER DSTSIZ
C
C     PARAMETERS FROM COMMON
C
      COMMON /COMTXT/ WHERE(8), WHO(8), WHAT(8), PAGE
      INTEGER PAGE
      COMMON /CONTOT/ TOTROL,TOTSPC
      DIMENSION TOTROL(5), TOTSPC(5)
      COMMON /COMFIL/ PRIIN,PRIOU,SECOUT,PRINTR
      INTEGER PRIIN,PRIOU,SECOUT,PRINTR
      COMMON /COMW/ FULL,ABBREV
      INTEGER FULL,ABBREV
      COMMON /COMSTF/ TEACHR, AIDE, AIDTCH
      INTEGER TEACHR, AIDE, AIDTCH
      COMMON/COMCST/ CURDOL,ACTUAL
      INTEGER CURDOL,ACTUAL
      COMMON /COMBAS/ BASEYR,NYEARS
      INTEGER BASEYR,NYEARS
      COMMON /COMEXP/SRVEXP(36,2,5), RELEXP(36,2,5)
      COMMON /COMIFL/ CUMINF(5)
      COMMON /COMYR/ YEARS (6)
      INTEGER YEARS
C
C     LOCALS
C
      INTEGER DST,J,YR
      DIMENSION TOTCST(5), TOTSTF(5), COST(2,5)
C
      WRITE(PRINTR,17)(WHERE(J),J=1,8),
     #            (WHO(J),J=1,8,1),(WHAT(J),J=1,8),PAGE
   17 FORMAT (1H1,79X,8A4,/,80X,8A4,/,80X,8A4,/,80X,'PAGE',I3)
      PAGE = PAGE + 1
      WRITE (PRINTR,100)
  10C FORMAT(/,40X,'REPORT 18',/,31X,'DISTRICT SUPPORT SERVICES',///,
     #       1X,'SUPPORT SERVICES')
      WRITE(PRINTR,223)(YEARS(YR),YEARS(YR+1),YR=1, NYEARS,1)
 223  FORMAT(/1X,31X,5(3X,'19',I2,'-',I2))
C
      DO 12 YR = 1, NYEARS, 1
          TOTCST(YR) = 0
          TOTSTF(YR) = 0
   12 CONTINUE
C
      DO 1000 DST = 1, DSTSIZ, 1
          WRITE (PRINTR,12C)(DSTNAM(DST,FULL,J),J=1, 8,1)
  120      FORMAT(/1X,8A4)
          WRITE(PRINTR,140)(DSTSTF(DST,TEACHR,YR),YR =1,NYEARS,1)
  140     FORMAT(8X,'PERSONNEL',15X,5F10.0)
C
C         GENERATE THE COSTS
C
          DO 217 YR = 1, NYEARS, 1
              COST(CURDOL,YR) = DSTCST(DST,CURDOL,YR)*DSTSUP(DST,YR)
  217     CONTINUE
          WRITE (PRINTR,300)(COST(CURDOL,YR),YR=1,NYEARS,1)
  300     FORMAT(8X,'COSTS (CONSTANT $)',7X,5F10.0)
C
          DO 500 YR = 1, NYEARS, 1
              TOTCST(YR) = TOTCST(YR) + COST(CURDOL,YR)
              TOTSTF(YR) = TOTSTF(YR) + DSTSTF(DST,TEACHR,YR)
  500     CONTINUE
C
 1000 CONTINUE
C
      WRITE(PRINTR,1123) (TOTSTF(YR),YR = 1, NYEARS,1)
 1123 FORMAT(//1X,'TOTALS',/4X,'PERSONNEL',22X,5F10.0)
      WRITE(PRINTR, 1200) (TOTCST(YR),YR=1,NYEARS,1)
 1200 FORMAT(4X,'TOTAL COST(CONSTANT $)',6X,5F10.0)
      DO 1300 YR = 1, NYEARS, 1
          TOTCST(YR) = TOTCST(YR) * CUMINF(YR)
 1300 CONTINUE
      WRITE(PRINTR, 1204) (TOTCST(YR),YR=1,NYEARS,1)
 1204 FORMAT(4X,'TOTAL COST(INFLATED $)',6X,5F10.0)
C
      RETURN
      END
```

WORKSHEET 1

DISTRICT INFORMATION

DISTRICT NAME: ______________________________

AGE GROUP: ______________________________

RUN DESIGNATION: ______________________________

YEAR	19__ - __	19__ - __	19__ - __	19__ - __	19__ - __
TOTAL STUDENT POPULATION					
INFLATION RATE (%)					

____

PREPARED BY: ______________________ DATE: ______________

____

____

____

____

WORKSHEET 2

SPECIAL EDUCATION CATEGORIES

CATEGORY NAME	CURRENT NUMBER SERVED
1.	
2.	
3.	
4.	
5.	
6.	
7.	
8.	
9.	
10.	
11.	
12.	
13.	
14.	
15.	

WORKSHEET 3A

INSTRUCTIONAL PROGRAMS

PROGRAM NAME	RESOURCES		CURRENT NUMBER FTE	
	TYPE	PRICE	TEACHERS	AIDES
1.				
2.				
3.				
4.				
5.				

WORKSHEET 3A

INSTRUCTIONAL PROGRAMS

(CONT.)

PROGRAM NAME	RESOURCES		CURRENT NUMBER FTE	
	TYPE	PRICE	TEACHERS	AIDES
6.				
7.				
8.				
9.				
10.				

WORKSHEET 3A

INSTRUCTIONAL PROGRAMS

(CONT.)

PROGRAM NAME	RESOURCES		CURRENT NUMBER FTE	
	TYPE	PRICE	TEACHERS	AIDES
11.				
12.				
13.				
14.				
15.				

WORKSHEET 3B

RELATED SERVICES

SERVICE NAME	RESOURCES		CURRENT NUMBER FTE	
	TYPE	PRICE	PROFSNLS	AIDES
1.				
2.				
3.				
4.				
5.				

WORKSHEET 3B

RELATED SERVICES

(CONT.)

SERVICE NAME	RESOURCES		CURRENT NUMBER FTE	
	TYPE	PRICE	PROFSNLS	AIDES
6.				
7.				
8.				
9.				
10.				

WORKSHEET 3B

RELATED SERVICES

(CONT.)

SERVICE NAME	RESOURCES		CURRENT NUMBER FTE	
	TYPE	PRICE	PROFSNLS	AIDES
11.				
12.				
13.				
14.				
15.				

WORKSHEET 4A

STUDENT PLACEMENTS IN INSTRUCTIONAL PROGRAMS

CATEGORY: ______________________ CURRENT PREVALENCE RATE: ______

STUDENT PLACEMENTS	19__ - __		19__-__	19__-__	19__-__	19__-__
PRIMARY PLACEMENTS	NUMBER	(%)	NUMBER	NUMBER	NUMBER	NUMBER
1.						
2.						
3.						
4.						
5.						
6.						
7.						
8.						
9.						
10.						
11.						
12.						
13.						
14.						
15.						
TOTAL UNDUPLICATED NUMBER		100%				
ADDITIONAL PLACEMENTS 1.						
2.						
3.						
4.						
5.						
6.						
7.						

WORKSHEET 4B

STUDENT PLACEMENTS IN RELATED SERVICES

CATEGORY: ______________________ CURRENT PREVALENCE RATE: ______

STUDENT PLACEMENTS	19__ - __		19__-__	19__-__	19__-__	19__-__
RELATED SERVICES	NUMBER	(%)	NUMBER	NUMBER	NUMBER	NUMBER
1.						
2.						
3.						
4.						
5.						
6.						
7.						
8.						
9.						
10.						
11.						
12.						
13.						
14.						
15.						

WORKSHEET 5

PERSONNEL RATIOS

INSTRUCTIONAL PROGRAMS	STUDENT/TEACHER RATIOS		AIDE /TEACHER RATIOS	
	CURRENT	DESIRED	CURRENT	DESIRED
1.				
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				
13.				
14.				
15.				

RELATED SERVICES	STUDENT/PROFSNL RATIOS		AIDE /PROFSNL RATIOS	
	CURRENT	DESIRED	CURRENT	DESIRED
1.				
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				
13.				
14.				
15.				

WORKSHEET 6

DISTRICT SUPPORT SERVICES

SERVICE NAME	RESOURCES		SERVICE LEVELS					NUMBER OF STAFF/ UNIT
	TYPE	PRICE	19__-__	19__-__	19__-__	19__-__	19__-__	
1.								
2.								
3.								
4.								

WORKSHEET 6

DISTRICT SUPPORT SERVICES
(CONT.)

SERVICE NAME	RESOURCES		SERVICE LEVELS					NUMBER OF STAFF/UNIT
	TYPE	PRICE	19__-__	19__-__	19__-__	19__-__	19__-__	
5.								
6.								
7.								
8.								

WORKSHEET 6

DISTRICT SUPPORT SERVICES
(CONT.)

SERVICE NAME	RESOURCES		SERVICE LEVELS					NUMBER OF STAFF/ UNIT
	TYPE	PRICE	19__-__	19__-__	19__-__	19__-__	19__-__	
9.								
0.								
1.								
2.								

WORKSHEET 6

DISTRICT SUPPORT SERVICES
(CONT.)

SERVICE NAME	RESOURCES		SERVICE LEVELS					NUMBER OF STAFF/ UNIT
	TYPE	PRICE	19__-__	19__-__	19__-__	19__-__	19__-__	
13.								
14.								
15.								
16.								